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PROVINCIAL GAZETTEERS OF INDIA

BARODA STATE

Physical aspects. Situation.

Baroda State (or Territories of the Gaikwār).—An important Native State in direct relations with the Government of India, but geographically in intimate connexion with the Presidency of Bombay. The territories of the State are situated in Gujarāt and in Kāthiāwār, but are so interlaced with British Districts that it is impossible, without reference to a detailed map, to realize accurately its position, extent, and boundaries.

Roughly speaking, it may be said that the State lies between 20° 45′ and 24° 9′ N. and 70° 42′ and 73° 59′ E., with the exception of the Okhāmandal tract, which lies between 22° 5′ and 22° 35 N. and 69° 5′ and 69° 20′ E.

Name.

The name by which the natives recognize the territories of Baroda and the capital town is Wadodarā, which according to tradition is a corrupt form of the Sanskrit word *vatodar* ('in the heart of the banyan-trees'). At any rate, this name well describes the capital of Baroda, inasmuch as in the vicinity of the city banyan-trees exist in great numbers. But the capital had also another name, namely, Vīrakshetra or Vīrāwāti ('a land of warriors'); and this name deserves special notice, as it is mentioned (along with Wadodarā) by the Gujarāt poet Premānand, who was a native of Baroda and flourished in the seventeenth century. Moreover, it is stated that the ancient name of the city was Chandanavati, and that it was so called after Rājā Chandan of the Dor tribe of Rājputs, who wrested it from the Jains. It is now almost impossible to ascertain when the various changes in the name were made; but early English travellers and merchants mention the town as Brodera, and it is from this that the name Baroda is derived.

Divisions and boundaries.

The Gujarāt portion of the State is divided into three great divisions or *prānts*: namely, the Kadi *prānt* to the north, the Baroda *prānt* in the centre, and the Navsāri *prānt* to the

south, while the Kāthiāwār portion is usually known as the Amreli *prānt*.

A consideration of the boundaries of these four administrative divisions will make clearer the geographical position of the scattered territories of the State. The most northerly *tālukas* of the Kadi *prānt* are bounded on the north and north-west by the Pālanpur and Rādhanpur States, while the southern half is bounded on the west by Ahmadābād District, and on the south by Ahmadābād and Kaira. The eastern portion of the *prānt* has for its boundary the Mahī Kāntha States. The Baroda *prānt* has on its northern side Kaira District, which juts in between the Petlād and Sāvli *tālukas*. The western side is bounded by a portion of Kaira, by Cambay, and by Broach District. To the south it is bounded by the river Narbadā, a portion of Broach District, and a portion of the Rewā Kāntha States, and on the east by the Pānch Mahāls District and the Rewā Kāntha States. The Navsāri *prānt* is nearly split into two by a portion of Surat District which almost crosses it from north to south. Bearing this in mind, it may be said with tolerable accuracy that this *prānt* is bounded on the north by Broach and the Rewā Kāntha States, on the west by Surat District and the sea, on the south by Surat, the State of Bānsda, and the Dāngs, and on the east by Khāndesh District. The chief portion of the scattered Amreli *prant* is surrounded by Junāgarh and other Kāthiāwār States, while the outlying Okhāmandal subdivision adjoins the Arabian Sea and the Gulf of Cutch, and is bounded on the land side by the State of Navānagar.

Area. The area of the State is now estimated at 8,099 square miles, made up as follows: (1) Kadi, 3,015 square miles; (2) Baroda, 1,887 square miles; (3) Navsāri, 1,952 square miles; (4) Amreli, 1,245 square miles. These figures differ from previous estimates by reason of the progress of a survey of the State which is now almost completed.

Hills. The greater part of the State lies within the area of the coastal band of alluvium which has been formed by the encroachment on the shallow Gulf of Cambay of the detrital deposits brought down by the many rivers, large and small, which drain the province of Gujarāt, the western slopes of Mālwā, and the southern parts of Rājputāna. The upward slope of this alluvial band is very gradual, so that, as a general rule, the face of the country appears to be a dead level, and it is only when the eastern side of the alluvial flat is approached that low hills begin to make their appearance.

In the Kadi *prānt* the only eminences that diversify the general flat surface of the country are hillocks and ridges of blown sandy loam, which rise, on an average, not more than 50 or 60 feet above the general level, and only occasionally attain a height of 100 feet or a little more. In the Baroda *prānt* the number of eminences deserving the name of hills is also very small, and the only ones claiming attention are in the Sankheda *tāluka* in the east. Here is the Achali ridge, of which the highest point rises 888 feet above sea-level, and the Lachharas hill (508 feet). The Navsāri *prānt* is much more diversified than the other divisions; and here the height of the hills ranges from about 400 feet to about 2,000, with the exception of the fortified peak of Sālher, which attains a height of 5,263 feet, and is the third highest point in the northern section of the Western Ghāts. The greater part of the Amreli *prānt* is occupied by rolling plains which, as a rule, are very treeless and cheerless in their aspect, and it is only in the Dhāri *tāluka* that we meet with hills worthy the name. This *tāluka* includes a great part of the well-known Gir forest, a tract zoologically interesting as being the last refuge of the Gujarāt lion. In the Baroda section of the Gir there are four groups of hills increasing in height from east to west; the Sarkala group, lying to the west and containing Sarkala peak (2,128 feet above sea-level); the Rajmal group, of which the highest point attains an elevation of 1,623 feet; the Nandivela group (highest point 1,741 feet); the Lapala group, with a culminating point of 1,547 feet. Across the northern ridge of this *tāluka* runs a small range of much lower hills, which near its western end is cut through by the Shatranjī river, 2½ miles north-east of Dhūri. Its highest point is Dharitor (893 feet above sea-level). The extreme northern part of the Kodinār *tāluka* is also hilly, but on a much smaller scale, while in Okhāmandal the highest elevation does not exceed 150 feet. The hills are mostly flat-topped, and form small plateaux which in most cases are more or less scarped round their summits.

Rivers.

The drainage of the Gujarāt portion of the State falls westward into the Gulf of Cambay, excepting that of the most northerly *tālukas*, which are drained by the Banās and Saraswatī rivers into the Rann of Cutch. The four principal rivers falling into the Gulf are the Sābarmatī, the Mahī, the Narbadā, and the Tāpti, all passing in small parts of their courses through the Baroda State. Of much smaller size are the Dhādhar, between the Mahī and the Narbadā; the Kim,

between the Narbadā and the Tāpti; and the Mindhola, the Pūrna, and the Ambikā to the south of the Tāpti. The SĀBARMATĪ first touches Baroda territory at Virpur in the Kherālu *tāluka*, and then flows through it for about 18 miles, thereafter entering Ahmadābād District. It receives no affluent of any size in Baroda; but farther down it is joined by the Khāri, the Meshwa, and the Vātrak, which drain outlying patches of the State. The MAHĪ only skirts the northern extremity of the Sāvli *tāluka*, and receives the waters of the Mesri, and a little lower down the united Goma and Karād, which flow for a few miles through part of Sāvli. The central part of the Sāvli *tāluka* discharges its superfluous rain-water through the Meni, which falls into the Mahī, 8 miles west of Baroda. The NARBADĀ itself only skirts portions of the State; but its northern tributary, the Orsang or Or, after being joined by the Unchh and Hiran, which drain the eastern part of the Sankheda *tāluka*, brings it an important accession of water. The TĀPTI flows for a distance of 43 miles through and past Baroda territory in the Songarh and Vyāra *tālukas*. Farther down it flows for 23 miles through the Kāmrej *tāluka*, and to the north of Surat skirts the outlying Baroda township of Vāriāv for $2\frac{1}{2}$ miles. The only river of importance in the Amreli *prānt* is the Shatranjī, which rises in the highest part of the Gir forest and drains the central portion of the division.

Scenery. The Baroda *prānt* presents a great diversity of aspect, the reason for this being that south of the city of Baroda black soil extends for a distance of 40 miles to the Narbadā, while all the country to the north of it is red soil. The black soil, although very fertile, is remarkable for the desert-like appearance it gives to the country where it predominates, while where the surface soil becomes red, there is a complete change. The latter is cultivated from one end to the other, there are high hedges between the fields, and the view is shut in on every side by lofty trees such as abound in the neighbourhood of the capital. It is for this reason that the country between Baroda and Ahmadābād has often been said to present the appearance of an English park. The Kadi *prānt*, consisting of an uninterrupted plain sloping gently from north-east to south-west, presents a much more uniform and consequently less picturesque aspect. The western portion of the division is especially monotonous. The Navsāri *prānt* is the most variegated of the four divisions of the State, affording within a small compass the scenery of cultivated land, hills, rivers,

forests, and seaboard. All the country to the north and north-east of Navsāri is thickly wooded, and these woods run for some distance down into the more level plains of Gujarāt along the Pūrna and Ambikā rivers. The most hilly portion of the country is in the Songarh *tāluka*. The inland *tālukas* to the south-east of Navsāri, and the country adjoining the Bānsda State, are more level, but not so rich or well cultivated as the coast subdivisions. Still here and there clumps of forest appear, which become larger and bolder as an approach is made to the Dāngs, where the wood is very thick. The Amreli *prānt*, being, with the exception of the Gir, devoid of hills and containing no rivers of any importance, is decidedly unpicturesque. The Okhāmandal division is, however, attractive, as it is on the sea-coast, and contains the important harbour of Dwārka.

There are no large natural lakes worthy of the name; but in the Kadi *prānt* artificial tanks of more than ordinary dimensions exist, and of these the Sarmishta at Vadnagar and the tanks in Visnagar and near Pātan may be specially mentioned. The Baroda *prānt* contains several large tanks, the most extensive being that of Maval in the Sāvli *tāluka*. The most important is, however, the great reservoir, almost deserving the name of lake, which has been constructed at Ajwa during the rule of the present Gaikwār, for the purpose of supplying the inhabitants of Baroda with potable water. Lakes.

Our knowledge of the geology of the State is mainly due to Mr. R. Bruce Foote of the Geological Survey of India, who, in the years 1892–4, visited and carefully examined all the regions containing important minerals. The results arrived at by him were published in a memoir, entitled *The Geology of Baroda State*. Geology.

In the Gujarāt portion, recent subaerial formations, consisting mainly of the great loess or blown-loam deposit, cover by far the greater part of the country. They are underlaid by the old alluvia of the great rivers, which are nearly co-extensive with them in the area they occupy, but are, as a rule, exposed only in the deep-cut river valleys. To the south of Baroda city the loess itself is largely obscured by extensive sheets of black soil. The Deccan trap rocks stand second in respect of the area they occupy, and are followed, but at a long distance, by the Eocene (nummulitic) rocks. Archaean granites and gneisses, and the lower Cretaceous rocks, occupy about equal areas of small extent, while the Chāmpāner quartzites, &c., are exposed over an area of only

about 3 square miles, in about twenty different small patches. The succession of the geological formations met with in the Kāthiāwār part of the State is shown in order in the following schedule:—

I. Recent { Alluvium and subaerial deposits. Miliolite.

II. Tertiary { Dwārka beds. Gāj beds.

III. Cretaceous—Deccan trap series.

Of these the Deccan trap series is much the most important formation in every way, being in many parts of great thickness. The Tertiary Gāj and Dwārka beds are met with only in the Okhāmandal *tāluka*.

Botany. The vegetation of the greater part of Baroda territory is characteristic of a highly cultivated country, so that beyond the regular crops the plants consist mainly of field-weeds, water or marsh plants growing in or fringing rivers, and species generally met with in hedges. The hilly portions of the State have a flora that is more or less characteristic of the Western Ghāts generally. Among the weeds of cultivation the species are chiefly referable to the natural families *Gramineae*, about thirty species; *Leguminosae*, about twenty species; *Compositae*, *Labiatae*, and *Cyperaceae*, about ten each; *Malvaceae*, *Scrophularineae*, *Convolvulaceae*, *Acanthaceae*, *Amarantaceae*, and *Euphorbiaceae*, from six to eight each. Aquatic or marsh plants include *Jussiaea repens*, *Trapa bispinosa*, *Caesulia axillaris*, *Ipomoea aquatica*, *Hygrophila spinosa*, *Herpestis Monnieria*, *Polygonum glabrum*, *Hydrilla verticillata*, *Vallisneria spiralis*, *Ottelia alismoides*, *Aeluropus villosus*, *Nymphaea Lotus*, *Nelumbium speciosum* (both confined to ponds), and various *Cyperaceae*. In waste places and by roadsides are found *Tridax procumbens*, *Achyranthes aspera*, *Coldenia procumbens*, *Evolvulus alsinoides*, *Tephrosia purpurea*, *Heylandia latebrosa*, *Waltheria indica*, various species of *Sida* and *Hibiscus*, *Hypoxis aurea*, *Chrozophora plicata*, *Jatropha gossypifolia*, *Argemone mexicana*, *Tribulus terrestris*, *Calotropis gigantea*, *Echinops echinatus*, *Solanum xanthocarpum*, *Datura fastuosa*, *Adhatoda Vasica*, *Clerodendron phlomoides*, *Leonotis nepetaefolia*, and various grasses such as species of *Andropogon*, *Polytoca*, and *Apluda*. Shrubs met with in waste places include *Woodfordia flori-bunda*, *Cassia auriculata*, and species of *Capparis* and *Zizyphus*. The more characteristic hedge-plants include species of *Maerua*, *Cadaba*, *Capparis*, *Zizyphus*, *Alangium*, *Cordia*, *Vitex Negundo*

one or two of the cactus-like *Euphorbias*, species of *Phyllanthus*, *Flueggea*, *Jatropha*, and at times *Streblus asper*. Mixed with the shrubs in these hedges are often various trees, the most characteristic being *Bombax malabaricum*. Climbing in hedges are many *Leguminosae*, *Menispermaceae*, *Convolvulaceae*, and *Asclepiadaceae*. Among planted trees and shrubs, or sometimes semi-wild in the neighbourhood of villages, may be mentioned *Michelia Champaca*, *Artabotrys odoratissimus*, *Polyalthia longifolia*, *Anona squamosa*, *Thespesia populnea*, *Grewia asiatica*, *Aegle Marmelos*, *Zizyphus Jujuba*, *Mangifera indica*, *Spondias mangifera*, *Moringa pterygosperma*, *Dalbergia Sissoo*, *Pongamia glabra*, *Poinciana elata*, *Parkinsonia aculeata*, *Tamarindus indica*, *Bauhinia variegata*, *Albizzia Lebbek*, *Acacia arabica*, *Psidium Guyava*, *Punica Granatum*, *Opuntia nigricans*, *Cordia Myxa*, *Bassia latifolia*, *Mimusops Elengi*, *Millingtonia hortensis*, several species of *Ficus*, *Artocarpus integrifolia*, *Holoptelia integrifolia*, *Phoenix sylvestris*, and *Borassus flabellifer*.

Fauna. The wild animals to be found in the Baroda State are the same as those of Gujarāt: namely, tiger, leopard, bear, hog, wolf, hyena, jackal, fox, *sāmbar*, spotted deer, barking-deer, *chinkāra*, *nīlgai*, antelope. Monkeys abound. Under game birds may be noticed: the spur-winged goose, the common grey goose, wild duck, teal, peafowl, sand-grouse, partridge, quail, snipe, bustard, florican, plover, &c. Fish are to be found in great abundance in the Mahī and the Narbadā. Inland in the Navsāri division fishing is carried on in the Pūrna, Mindhola, and Ambikā rivers.

Climate and temperature. In the Baroda *prānt* the hottest months are May and June, when the maximum temperature is about 105°, though occasionally it rises to 107° or even to 110°. The minimum temperature during this period is about 80°. The rainy season usually sets in about the middle or latter part of June, and ends in October. During this period the climate is hot, moist, and very relaxing, with a maximum temperature of about 86° and a minimum of 78°. The cold season, which commences in November and lasts for about four months, is dry and cool, the average maximum being about 90° and the minimum 50°. The coldest months are generally December and January, while the most unhealthy are September and October. The Kadi *prānt* is the healthiest division of the State. In the hot season the temperature here is high, the average maximum being about 100° and the minimum 72°. But the rainy season is pleasantly moist and cool, forming a great contrast to the Baroda division. Moreover, Kadi enjoys a moderately good

cold season, lasting from November till the middle of February, with a maximum temperature of about 90° and a minimum of 51°. In the Navsāri *prānt* a distinction must be drawn between the *rāni*, or forest *mahāls* of Mahuva, Vyāra, Songarh, and part of Velāchha, which are unhealthy, and the *rāsti mahāls* of Navsāri, Palsāna, Kāmrej, and Gandevi, where the climate is good. The *rāni mahāls* are at all times insalubrious. In the *rāsti mahāls*, the healthiest tracts during the hot season are Navsāri, Gandevi, and Bilimora. Here the close proximity of the sea maintains a moist and temperate climate; and though the early part of the hot season is somewhat heavy and close, the regular sea-breezes, which set in towards the end of April, produce a most agreeable change. The maximum temperature during the hot season is 101° and the minimum 74°. In the rainy season the corresponding figures are 91° and 70°, and in the cold season 87° and 60°. In the Amreli *prānt* the climate, except in the Dhāri and Kodinār *tālukas*, which are malarious and enervating, may be described as dry and salubrious. The hot season, which lasts from March to June, has an average maximum of 98° and a minimum of 84°. During this portion of the year fresh and cool breezes nearly always set in at evening. In the rainy season the maximum is 88° and the minimum 77°, while in the cold season the corresponding figures are 88° and 60°.

Rainfall.

In 1881 it was calculated, probably on very imperfect data, that the average rainfall of the State amounted to 58 inches in Navsāri, 37·3 in Baroda, 32 in Kadi, and 21·4 in Amreli. The similar averages arrived at for the decades 1882–1891 and 1892–1901 give the following result:—

	1882-91.	1892-1901.
	Inches.	Inches.
Navsāri . . .	53·9	51·9
Baroda . . .	37·9	38·1
Kadi . . .	30·1	27·4
Amreli . . .	22·3	21·6

It will thus be noticed that, though the Southern Gujarāt divisions are much more favoured than the northern ones, in the Navsāri division rainfall appears to be steadily diminishing, and the same remark holds good with reference to Kadi.

History.

The history of the Baroda State as such dates only from the break-up of the Mughal empire. For previous events see BOMBAY PRESIDENCY and GUJARĀT.

Early Marāthā invasions.

The first Marāthā invasion of Gujarāt took place in 1705. A few years later, in 1712, a Marāthā leader, Khande Rao Dābhāde by name, became so powerful that he was able to exact a fourth of the effects of all travellers who did not purchase his passport. He afterwards took part in various battles with the Muhammadan viceroys, and finally returned to Sātāra, where he was created Senāpati or commander-in-chief in 1716. Four years later the emperor Muhammad Shāh granted the Marāthās the right to levy *chauth* (a quarter of the revenues) in Gujarāt. Khande Rao was some time afterwards present at the battle of Bālāpur, where his troops behaved with great bravery; and it was on this occasion that one of his officers, Dāmāji Gaikwār, distinguished himself so much that he obtained the title of Shamsher Bahādur, or the Illustrious Swordsman, a title which has been borne by the Gaikwārs ever since. In 1721 Khande Rao and Dāmāji both died, the former being succeeded by his son Trimbak Rao, and the latter by his nephew, Pilāji.

Pilāji Gaikwār, 1721–32.

Pilāji Gaikwār, who may be considered as the founder of the present ruling family, obtained the command of a *pāga*, and thereafter distinguished himself by his incursions into Gujarāt. But in consequence of internal dissensions he was obliged to remove to Songarh, and it was from here that he conducted his future raids. Not only was Songarh, therefore, the cradle of the Gaikwār house, but it continued to be their head-quarters till 1766. For several years Pilāji, aided by other Marāthā chiefs, invaded and exacted tribute from the Surat *atthāvisi* or 'twenty-eight subdivisions.' In 1723 he marched on Surat itself, defeated the governor, and from that time began regularly to levy tribute in Gujarāt. Help was afterwards afforded him by the Desais of Pādra, Chhani, and Bhayali, by whose assistance he was enabled to direct his ravages as far as the Mahī river. In 1725, after establishing his claim to the districts south of the Mahī—namely, Baroda, Nāndod, Chāmpāner, Broach, and Surat—he returned to his stronghold of Songarh, while at about the same time his superior, the Senāpati, established himself at Dabhoi, not far from Baroda, making this place, which had been captured by Pilāji, his regular head-quarters. Reverses now began to befall the Marāthas, and for a time they almost lost the hold they had gained over Gujarāt. Pilāji himself was forced to fly to Cambay, and thereafter to Sorath. But the Muhammadan viceroy, Sarbuland Khān, owing to want of succour from Delhi, rapidly lost ground in his turn, and was obliged to

cede to Pilāji a share in the *chauth* of the districts south of the Mahī. On the other hand, as Pilāji was the agent of the Peshwā's rival the Senāpati, the Peshwā directed his own adherent, the Ponwār, to drive Pilāji out. Sarbuland Khān now came to terms with Peshwā Bājī Rao, and promised him the *chauth* and *sardeshmukhi* (an additional tenth), on condition that the Peshwā should support him against Pilāji and other Marāthā leaders. Notwithstanding this, in 1727 Pilāji succeeded in capturing both Baroda and Dabhoi. The next event that happened was that Sarbuland Khān's grants to the Peshwā were not ratified at the Delhi court, and he was replaced as viceroy in 1730 by Abhai Singh, Rājā of Jodhpur. As soon as the latter was in power, Bājī Rao concerted with him to oppose Pilāji, and, if possible, to turn him out of Baroda. For this purpose the Peshwā advanced to lay siege to that town in 1731, but was called away by the news that Nizām-ul-mulk's army was preparing to attack him. During his march he met the main army of the Senāpati, who was supported by the Gaikwār, and utterly routed it. This was the celebrated battle of Bhilapur, which took place in 1731. Pilāji, who was grievously wounded, had again to retire to Songarh; but, fortunately for him, the Peshwā did not deem it politic to crush completely the other Marāthā chiefs, and so he nominated Pilāji as *mutālik* of the new Senāpati, Jaswant Rao Dābhāde (appointed in the place of his father, who had been slain in the battle). At the same time he conferred on Pilāji the title of Sena Khās Khel ('leader of the sovereign band'). Pilāji, as *mutālik*, had now all the resources of the Senāpati at his disposal, but his energetic career was put a stop to in 1732, when he was assassinated at Dākor by the agents of Abhai Singh.

Dāmāji Gaikwār, 1732–68.

Pilāji was succeeded by his son Dāmāji, who at the beginning of his career had many troubles to contend with. Abhai Singh, taking advantage of the confusion into which the death of Pilāji had thrown the Marāthās, marched rapidly on Baroda, and captured both the fort and the town. Dāmāji thereupon fell back upon Dabhoi, and busied himself with preparations for reprisals in the direction of Ahmadābād. This raid met with partial success, and he was also fortunate in other expeditions, the result being that Baroda was recaptured in 1734, since which date it has always been in the hands of the Gaikwārs. After this event the Gaikwār's power began to develop rapidly, and Abhai Singh was consequently constrained in 1737 to abandon Gujarāt altogether. Thereafter Momin

Khān, who had succeeded Abhai Singh as Mughal viceroy, but found it difficult to maintain his position at Ahmadābād, summoned Rangoji, Dāmāji's general, to his assistance, promising that he would, with certain exceptions, grant the Gaikwār one-half of the revenue of Gujarāt. This viceroy remained the ally of the Gaikwār until his death, in 1742.

About this period Dāmāji's power increased very rapidly, in both Gujarāt and Kāthiāwār. This may be inferred from his capture of Bānsāh, near Ahmādābād, and from his demonstration against Broach, which was held by an agent for the Nizām, upon which occasion it is said that he succeeded in obtaining a share in the customs of the city. Moreover as the Senāpati, Jaswant Rao Dābhāde, had proved utterly incompetent for his situation, Dāmāji held the real power as agent for the late Senāpati's widow; so much so, that when she died in 1747, he was nominated deputy of the Peshwā in Gujarāt. It was while his power was thus increasing, that Dāmāji was incited to make an inroad into Mālwā, which was very successful. After Momin Khān's death, Fida-ud-dīn was appointed viceroy; and he began proceedings by vigorously attacking and defeating Rangoji, but on the return of Dāmāji from Mālwā, matters took a turn in favour of the Marāthās. Fida-ud-dīn fled the country, Rangoji captured Petlād, and Dāmāji's brother, Khande Rao, established the rights of his family to share in the city of Ahmadābād. Meanwhile, there had been dissensions at Surat, which resulted, in 1751, in a share of the revenue of that city being granted to Dāmāji, an equal share being subsequently allotted to the Peshwā. In 1751 Dāmāji was called upon by Tārābai of Sātāra to rescue her grandson, the representative of Sivajī, from the power of the Brāhmans. In response to this request, he at once left Songarh with an army of 15,000 men, and attacked and defeated at Nimb a much stronger force which opposed his march. But disaster afterwards befell him, and he was finally hemmed in by the Peshwā's army. Dāmāji then offered to come to terms with the Peshwā; but the latter, pretending to consider the matter, enticed him into his neighbourhood, and then suddenly seized him and imprisoned him at Poona. The Peshwā now made great efforts to wrest Gujarāt from the Mughal and the Gaikwār party; but failing in his attempts, he resolved to come to terms with Dāmāji, and the latter found himself obliged to accept the Peshwā's conditions, which involved the cession of half of Gujarāt and of all future conquests. He was also to maintain 10,000 horse, to assist the

Affairs at Surat.

Dāmāji's contest with the Peshwā.

Expulsion of the Mughals from Gujarāt and further extension of Dāmāji's power.

Peshwā in time of need, and to pay $5\frac{1}{4}$ lakhs as tribute. The next event of importance which took place was the campaign of Dāmāji, and other powerful Marāthā chiefs, in 1753, which resulted in the fall of Ahmadābād. From this time the Mughal empire in Gujarāt practically came to an end, and the country was divided between the Peshwā and the Gaikwār, according to the terms previously settled.

Dāmāji Gaikwār was one of the many great Marāthā chiefs who marched to fight Ahmad Shāh Abdāli, and in the fatal struggle which took place on the plain of Pānīpat (1761) he and his troops distinguished themselves highly. He was fortunate enough to escape death, and to make an honourable return to Gujarāt. There he continued with undiminished vigour to crush the combined efforts of the Musalmāns, who had hoped to win something by the great disaster which had befallen the Marāthās. It was shortly after this that Dāmāji transferred his capital from Songarh to Pātan (the ancient Anhilvāda). Between 1763 and 1766 Dāmāji took possession of almost the whole of what is now the Kadi *prānt*, and thereafter added very considerably to his power and revenue by conquests in Kāthiāwār. He also levied tribute on the States of Idar and Rājpīpla. The disaster at Pānīpat was shortly followed by the death of the Peshwā Bālāji, when the rule passed to the youthful Mādhava Rao, who was soon thwarted by his ambitious uncle, Raghunāth Rao (Raghuba), with whom Dāmāji elected to make a close alliance. But in 1768 Mādhava Rao defeated the allies at Dhodap, and captured Raghunāth Rao and Dāmāji's son Govind Rao. The most onerous terms were again exacted from the Gaikwār by the Peshwā; and as Dāmāji himself died soon after the battle, it appeared as if the prosperity of his house had come to an end.

Last conflict with the Peshwā and death of Dāmāji.

Struggles between Dāmāji's sons Govind Rao and Fateh Singh, 1768–78.

Dāmāji left behind him six sons, of whom the eldest, Sayāji Rao, an idiot, and the second, Govind Rao, a weak and vacillating character, at once claimed the *gaddi*. These rivals were under the necessity of abiding by the arbitration of the Peshwā, who thereupon released Govind Rao from his imprisonment at Poona, and confirmed him in the title, but only after the latter had agreed to pay a very large sum. In the meantime, Fateh Singh, the youngest son of Dāmāji, occupied the city of Baroda on behalf of Sayāji Rao. In 1771 Fateh Singh proceeded to Poona, and there obtained a revision of the Peshwā's decision. Sayāji Rao, whose position, however, was always merely nominal, was now declared Sena Khās Khel, and Fateh Singh was appointed his *mutālik*. These

arrangements had, however, scarcely been completed, when Khande Rao, a younger son of Pilāji Gaikwār, on whom his father had bestowed the governorship of Kadi, began to disturb the country, first assisting one nephew and then the other, just as his policy dictated. Fateh Singh, being under the apprehension that in this disturbed state of affairs the Poona court would have little difficulty in acquiring Gujarāt, returned from Poona to Baroda, and made overtures to the East India Company. In 1772, when Broach was taken by assault by the British, he entered into a treaty with the Bombay Government for a mutual participation in the revenues of the conquered districts. But further proposals of Fateh Singh being refused, he and Govind Rao were left for some time to fight out their quarrel by themselves. In the meanwhile, Raghuba, who had made himself Peshwā, reversed the decision given in favour of Sayāji Rao and recognized his old ally, Govind Rao, as Sena Khās Khel. Raghuba himself was soon after ousted from Poona by a Regency established on behalf of his infant grand-nephew (Mādhava Rao II); but in March, 1775, he obtained the support of the Bombay Government by the Treaty of Surat, under the sixth article of which he engaged himself to 'procure from the Gaikwār a grant to the Company for ever of his share in the revenues of the town and *pargana* of Broach.' On this treaty being disallowed by the Supreme Government and replaced by the Treaty of Purandhar with the Poona Regency, the rival Gaikwārs, who had been in continuous conflict, were again left to settle their own disputes. What followed is not accurately known; but the upshot was that in February, 1778, Fateh Singh obtained from Poona the title of Sena Khās Khel, and Govind Rao had to be content with a *jāgīr* of 2 lakhs.

Fateh Singh Gaikwār, 1778-89.

Fateh Singh devoted the first part of his undisturbed rule to an attempt to get back from the Company Broach and the districts adjoining, which had been handed over by the Mārāthās in virtue of the Treaty of Purandhar (1776); but his efforts were unsuccessful. In 1779 a second war broke out between the Poona Regency and the British, and Fateh Singh entered into an alliance with the latter. This was ratified by a treaty made at Kandila (Dabhoi) in January, 1780, by the terms of which Fateh Singh was to become independent of the Peshwā, and was to retain his own share of Gujarāt, while the British took the Peshwā's portion. This arrangement was afterwards virtually cancelled by the Treaty of Sālbai.

Campaign of 1780.

In February, 1780, Holkar and Sindhia, as the Peshwā's allies, crossed the Narbadā and attacked Dabhoi, a town which was bravely defended by

Mr. James Forbes (well-known as the author of the *Oriental Memoirs*). The war afterwards dragged on without any decided results, Fateh Singh remaining faithful to the British, notwithstanding the efforts of Sindhia to win him over. It was concluded by the Treaty of Sālbai (May, 1782), the general effect of which was to leave the Gaikwār in his old position. He retained what he had before the commencement of the war, but he was for the future to pay tribute to Poona as usual. Fateh Singh died in December, 1789.

Mānāji Gaikwār (Regent, 1789–93).

In spite of the remonstrances of Govind Rao, another brother, Mānāji, at once assumed the reins of government, and paid a large sum to Poona as *nazar*. Sindhia, however, supported the cause of Govind Rao, and the rivalry between the brothers was kept alive until Mānāji's death, which occurred in August, 1793. The imbecile Sayāji Rao had died in the previous year. Govind Rao was now allowed to assume, or rather to purchase, the title of Sena Khās Khel. The demands made by the Poona court were so heavy that the Company was compelled to interfere in order to prevent the dismemberment of the Baroda State. Before entering his capital, Govind Rao had one more struggle, for a rebellion was raised against him by his own illegitimate son, Kanhojī. The latter was, however, betrayed by his own forces, and was obliged to surrender to his father. Afterwards he escaped and was joined in a fresh insurrection by Malhār Rao, the son of Khande Rao, previously mentioned, who had died in 1785. But the two quarrelled, Kanhojī was again betrayed and imprisoned, and Malhār Rao was forced to purchase peace. The matter of greatest interest which occurred during the rule of Govind Rao was his campaign against Aba Shelukar, who had been entrusted with the revenue management of the Ahmadābād district on behalf of the Peshwā. Several engagements took place, and finally Shelukar was betrayed by his own troops and imprisoned at Baroda. Hostilities now ceased, and the Peshwā in 1799, for the first time, leased the Ahmadābād territory to the Gaikwār. Shortly afterwards, in September, 1800, Govind Rao died.

Govind Rao Gaikwār (restored), 1793–1800.

Aba Shelukar.

Anand Rao Gaikwār, 1800–19.

Anand Rao, the eldest legitimate son of Govind Rao, succeeded; but he was of weak mind, and his position was soon disputed by his illegitimate brother Kanhojī and the latter's old ally Malhār Rao. Both parties appealed to the Bombay Government, which decided in favour of Anand Rao, and in April, 1802, a force from Cambay entered Kadi and established Anand Rao's authority. This was the first of many services

rendered to the Baroda State by the Bombay Government, and the latter was not slow to claim an ample reward. A treaty was signed in July, 1802, by which considerable territories were ceded to the Company, and the right of British interference in the case of anything improper or unjust being done by Anand Rao or his successors was acknowledged. From this time the authority of the British Resident at Baroda was paramount. It was at the same period that Holkar and Sindhia, who were at war with each other, covered Central India with their armies and threw covetous eyes on Gujarāt. Holkar's attempt was at once frustrated; but Sindhia's designs were more alarming, as he sent an army of 12,000 or 14,000 men in the direction of the northern districts. He was, however, pacified when, with the assistance of the British, he received 10 lakhs which he claimed to be due to him. In 1804 the Peshwā again renewed the lease of the Ahmadābād territory to the Gaikwār, for a term of ten years, at the rental of $4\frac{1}{2}$ lakhs per annum.

Danger from Holkar and Sindhia.

In April, 1805, a definitive treaty was concluded between the British Government and the State of Baroda, by which the establishment of a Subsidiary force and the cession of certain districts for its maintenance were settled. This treaty also contained articles to the effect that the foreign policy of the State should be conducted by the British, and that all differences with the Peshwā should be similarly arranged. Fateh Singh, a younger brother of Anand Rao, became a member of the State Council in 1807, and gradually exercised increased powers. In 1812 the celebrated Gangādhar Sāstri became Minister. The restless intriguer, Kanhojī, again endeavoured to subvert his brother's administration; but the plot was discovered in good time, and Kanhojī was arrested and promptly deported to Madras. The long-pending claims of the Peshwā on the Gaikwār now came up for settlement; and, as the political relations between the States were anything but friendly, it was feared that the lease of Ahmadābād would not be renewed. Gangādhar Sāstri was accordingly deputed to set out for the Poona court. As a result of intrigues, set on foot by Sītārām, a dismissed Minister of Baroda, the Peshwā refused to listen to the terms offered by the Sāstri, assigned the Ahmadābād farm to Trimbakji Danglia, and left all other points unsettled. While negotiations were still being carried on, Gangādhar was murdered. An attempt at a revolution in Sītārām's favour followed, but it proved abortive, and finally in 1816 the ex-Minister was deported to Navsāri.

Treaty of 1805.

Anand Rao and Fateh Singh Gaikwār.

Claims of the Peshwā.

A confederacy of the great Marāthā chiefs had now been

Treaties of

1817, and subsequent war.

formed, and the Peshwā was tampering with Fateh Singh, while his agents were causing disturbances in Kāthiāwār. The question of the Peshwā's claims on the Gaikwār was opened afresh, and matters proceeded so far that every preparation for war between the British and the Peshwā had been made, when the latter suddenly gave way, the result being that a treaty was signed at Poona in 1817. Under this the Gaikwār became independent of the Peshwā, who surrendered all past claims for an annual payment of 4 lakhs, the tribute of Kāthiāwār was ceded to the British, and Ahmadābād was farmed in perpetuity to the Gaikwār for $4\frac{1}{2}$ lakhs per annum. In November of the same year a supplemental treaty was entered into with the Gaikwār, by which the latter consented to make additions to the Subsidiary force, ceded his share of Ahmadābād on payment of its estimated value, and obtained the province of Okhāmandal and the island of Beyt, &c. It is unnecessary to describe here the wars which ensued almost immediately with Bājī Rao, the Rājā of Nāgpur, the Pindāri hordes, and Holkar and Sindhia, during which Fateh Singh behaved as a stanch ally of the British. The reward for his valuable aid was the remission of the tribute of 4 lakhs, due to the Peshwā, whose power was now destroyed. Shortly afterwards, in 1818, Fateh Singh died, and was succeeded in the regency by his younger brother, Sayāji Rao. Anand Rao himself died in 1819, and Sayāji Rao ruled in his own name.

Regency of Sayāji Rao.

Sayāji Rao II Gaikwār, 1819-47.

In 1820 the commission, which, with the Resident at its head, had carried on the administration during the reign of Anand Rao, was abolished, and the Gaikwār appointed two Ministers, but, as he trusted neither, employed Mīr Sarfarāz Alī to watch them both. The State was, however, in great pecuniary embarrassments; and as the Gaikwār refused to follow the advice of the Resident, affairs, both financial and political, rapidly grew worse. After much delay Sayāji Rao consented to the issue of septennial leases of the *mahāls* to respectable men, instead of annual leases to persons of doubtful means and position. The intrigues which followed the adoption of this reform led to the dismissal of one of the Ministers and the appointment of two joint Dīwāns. In 1828 Sir John Malcolm, Governor of Bombay, issued a proclamation announcing the temporary sequestration of Petlād, Dabhoi, Kadi, Amreli, &c., the value of which was estimated at over 10 lakhs. And again in 1830, districts to the annual value of about 10 lakhs were attached, in order to provide for the reorganization of the Contingent of 3,000 horse; but this second

sequestration was disapproved by the Court of Directors in 1832, and the territory was restored. In 1831 Sir John Malcolm was succeeded by Lord Clare, who attempted by conciliatory measures to undo the consequences of his predecessor's severity. Steps were taken to satisfy the creditors of the State, and the Gaikwār pledged himself to keep the Contingent in an efficient condition. Unfortunately, however, a period of misgovernment again began, and all remonstrances were unheeded. The deposition of Sayāji Rao was contemplated in 1838, but in 1839 he made a complete submission and expressed his desire to conform to the wishes of the Government. A better system of administration was introduced into that portion of Kāthiāwār which belonged to the Gaikwār, and compensation was paid for robberies committed by Baroda subjects. But corrupt practices still prevailed at Baroda, not only in and about the court, but also in the Resident's office, and intrigues were rampant.

Continued troubles.

In 1847 Sayāji was succeeded by his eldest son, Ganpat Rao, who introduced many reforms into the State. Influenced by the Resident, he built roads, bridges, and *sarais*, planted wayside trees, prohibited infanticide and the sale of children, settled claims for robberies committed in the State, and generally pursued a path of progress. In 1854 the political supervision of Baroda was transferred from the Government of Bombay to the Supreme Government. The last year of Ganpat Rao's life (1856) was marked by his cession of land required for the construction of the Bombay, Baroda, and Central India Railway.

Ganpat Rao Gaikwār, 1847–56.

As Ganpat Rao left no legitimate male issue, he was succeeded by the eldest of his surviving brothers, Khande Rao. During the Mutiny the young Gaikwār stood stanchly by the British, and assisted in maintaining peace and security in Gujarāt. In 1862 he received the right of adoption. He was also created a G.C.S.I. Khande Rao, especially at the beginning of his reign, desired to improve the administration of the State, and introduced some beneficial changes; but his fondness for the chase, jewels, displays, and buildings left him no money to spend on useful public works. However, he constructed the branch railway from Miyāgām to Dabhoi, attempted to improve the land revenue system, and commenced a revenue survey.

Khande Rao Gaikwār, 1856–70.

At the time of Khande Rao's death in 1870, his brother Malhār Rao, who had been engaged in a plot for his deposition, was a prisoner at Pādra. But as he was the undisputed heir

Malhār Rao Gaikwār, 1870–5.

in default of legitimate sons, he was at once released and proclaimed Mahārājā. From the outset Malhār Rao determined to take revenge for the sufferings he had endured at Pādra, and consequently ill-treated Khande Rao's servants and dependents. The administration rapidly deteriorated, the weight of taxation was increased, and folly, extravagance, and cruelty prevailed. The Bombay Government, to which the direction of affairs in Baroda had been restored in 1860, appointed Colonel Phayre as Resident, who devoted all his energies to exposing abuses. As a result of Colonel Phayre's strong representations, the Government of India appointed a Commission of inquiry, which reported that the charge of general maladministration was proved. Malhār Rao was warned that he would be held responsible, and called upon to effect thorough reforms before the end of 1875. In consequence of the strained relations between the Resident and the Mahārājā, it was determined to appoint Colonel Sir Lewis Pelly, in place of Colonel Phayre, as Special Commissioner and Agent to the Governor-General. Meanwhile, in November, 1874, an attempt to poison Colonel Phayre was reported. Sir Lewis Pelly arrived in December and assumed the virtual direction of the administration. Inquiries were made into the poisoning case; and the Government of India issued a proclamation in January, 1875, notifying that the Gaikwār had been arrested, and that, pending the result of an investigation by a Commission, they had assumed the administration of the State. The Commission, which was presided over by Sir Richard Couch, Chief Justice of Bengal, was not unanimous in its finding. The three English members came to the conclusion that an attempt to poison Colonel Phayre had been instigated by Malhār Rao, while the three native members did not consider him guilty. It was finally decided, as stated in a proclamation issued in 1875, that the Mahārājā must be deposed, 'not because the British Government have assumed that the result of the inquiry has been to prove the truth of the imputation against His Highness, but because, having regard to all the circumstances relating to the affairs of Baroda from the accession of His Highness Malhār Rao, his notorious misconduct, his gross misgovernment of the State, and his evident incapacity to carry into effect necessary reforms,' the step was imperatively called for. In accordance with this resolution, Malhār Rao was at once deported to Madras, where he resided under the surveillance of a British officer until his death in 1893.

The Commission of 1873.

Deposition of Malhār Rao.

Jamnābai, widow of Khande Rao, returned to Baroda, and, with the consent of the Government of India, formally adopted as the son and heir of Khande Rao, with the name of Sayāji Rao, a boy of thirteen years of age, who was descended from a distant branch of the family. During his minority the administration was conducted by Rājā Sir T. Mādhava Rao as Dīwān, and great reforms were inaugurated in every branch of the service. The finances were restored to a healthy condition, an efficient revenue system was introduced, vexatious taxes were swept away, the Judicial, Police, Medical, and Educational departments were reorganized, the system of railways was widely extended, and public buildings were erected in all parts of the State. In 1881 Sayāji Rao, whose education had been carefully supervised by a European tutor, was formally installed and invested with full powers. He immediately commenced his career by entering vigorously into every detail of the administration, as will be described below. He bears the hereditary title of Mahārājā, and is entitled to a salute of 21 guns. Sayāji Rao III Gaikwār, present Mahārājā.

The style of architecture, as in the rest of Gujarāt, is that sometimes called Jain, though many of the finest temples are Hindu. It is remarkable that the art is still living, and has not been replaced by inferior work in brick and plaster, as in some parts of India. The temples are distinguished by tapering spires or *sikharas*, ornamented gateways, halls or *mandapas*, and ornamental archways in front of the main buildings. The earliest buildings were probably of brick; but later the sandstone of northern Kāthiāwār came into use, while white marble was also employed, though the latter material has been carried away and burnt for lime. Many temples were destroyed by the Muhammadans. The chief remains now existing are at PĀTAN, SIDHPUR, MODHERA, DABHOI, and VADNAGAR; but a number of places still await examination. Archaeology and architecture.

The table on p. 59 shows the chief statistics of population in 1901. The density of population in the whole State is 229 persons per square mile, ranging from 147 in Amreli to 288 in the Baroda *prānt*, excluding the city. In the small island of Beyt and in the city of Baroda the density is far greater, rising to 1,153 and 11,532 persons per square mile. The rural population is about three times as great as that of the towns. Population. Density.

In 1872 the population was estimated at 2,004,442, while in 1881 it was 2,185,005, an increase of 9 per cent. In 1891 the number further rose to 2,415,396, or by 10·7 per cent. Ten years later the population was only 1,952,692, a decrease of Movement of population.

19 per cent. This diminution, chiefly due to the effects of plague and famine, was not uniform for all parts of the State; for while in Amreli and Navsāri the decrease was 3·7 per cent. and 5·9 per cent. respectively, in Baroda it was 22·8 per cent. and in Kadi 24 per cent. The city of Baroda lost 10·8 per cent. of its population in the same period.

Religion and sects. Of the total population in 1901, 1,546,992 were returned as Hindus, 176,250 as Animists, 165,014 as Musalmāns, 48,290 as Jains, 8,409 as Pārsīs, 7,691 as Christians, 38 as Sikhs, and 8 as Jews. Taking the three main sects of Hindus, Saivas numbered 276,489, Sāktas 260,096, and Vaishnavas 1,010,351. The Jains are divided into three sects: the Swetāmbari with 34,410 adherents, the Digambari with 9,599, and the Dhūndhia with 4,281. Musalmāns have two main sects: the Sunnis 129,508, and the Shiahs 35,506. The Pārsīs may also be divided into two sects: the Shahanshāhis (or Shenshais), 6,010 in number, and the Kadīmis, 2,399. Animists include all members of the forest tribes who are neither Hindus, Musalmāns, nor Christians.

Age. The age statistics, as elsewhere, are unreliable, and only a few general conclusions can be drawn from the results of the Census. Of the total population, children under the age of 5 formed only 10 per cent., those from 5 to 15 formed 25 per cent., adults between 15 and 40 formed 45 per cent., and those above 40 formed 20 per cent. These figures point to the effects of famine, and a comparison between the statistics of 1891 and 1901 shows still more clearly the disastrous nature of the decade. While the decrease in population at all ages was 19·2 per cent., the number of children under 10 fell by 35·6 per cent., and the number of persons over 60 by 40·6 per cent. The mean age for males is 23·56, and for females 23·76.

Vital statistics. Except in the city of Baroda, no rules are in force requiring the registration of births or deaths, but it has been the custom for the police and *pātels* to make monthly reports through the *tāluka* officers to the Sanitary Commissioner. More effective regulations have, however, been made for the future. In 1899–1900 the recorded birth-rate was 13 per thousand, and the death-rate 54·5. That year was, however, one of great distress, and during the previous five years mortality had averaged only 17·7 per thousand. In 1904–5 the births reported were 22·3 per thousand and the deaths 24·7. More than half the deaths are ascribed to fever, but the diagnosis, as usual, is faulty. Guinea-worm is common in Okhāmandal

and Kodinār. Epidemics of cholera and small-pox are not uncommon, and 39,300 deaths from the former and 6,300 from the latter disease were recorded in the decade ending in 1900–1.

Plague made its first appearance in the latter part of 1897, and since that time has caused considerable ravages. By the end of 1904–5 the number of deaths due to this cause alone was 44,251, but here again the statistics are not very trustworthy. The worst year was 1903–4, in which nearly 15,000 deaths were recorded. In the beginning of the plague epidemic the measures resorted to by the State were much the same as those adopted in British territory. A great portion of the city of Baroda was evacuated, and the people were located in sheds erected in fields outside. Persons coming from other affected parts were quarantined for a minimum period of ten days. All houses were whitewashed, and disinfectants were freely used. A similar course was adopted at Petlād, Navsāri, and other towns. But as forcible segregation and other coercive proceedings led to no appreciable benefit, the only preventive measures now in force are thorough cleansing, disinfection, and the distribution of medicine.

Males exceed females by 64,576, the former numbering 1,008,634 and the latter 944,058. This deficiency of females is a characteristic of Gujarāt generally. Taking the different religions, it appears that among the Hindus there are 929 females to every 1,000 males, among the Jains 951, among the Musalmāns 956, among the Christians 819, and among the Animists 971. The Pārsīs form an exception, the rates for this community being 1,265 females per 1,000 males. Sex.

Of the whole population, 35·2 per cent. of both sexes are unmarried, 50·1 per cent. married, and 14·7 per cent. widowed. The following table compares the actual numbers of either sex in 1891 and 1901:— Civil conditions.

	1891.			1901.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
Married .	1,287,575	646,315	641,260	978,626	487,550	491,076
Unmarried .	889,992	541,592	348,400	687,211	422,415	264,796
Widowed .	237,829	65,076	172,753	286,855	98,669	188,186

Among Hindus the first decade of life includes 1,584 widows and 21,431 wives, while the next age period (10–15) includes 4,287 widows and 54,955 wives. Thus before reaching what is considered in most countries the marriageable age,

there are already in this State 5,871 widows and 76,386 girl-wives. At each age-period the number of widows increases until the maximum is reached at the age 40–45. The number of widowers is also greatest at this period. Nearly 51 per cent. of Hindus are married, 48 per cent. of Jains and Musalmāns, 47 per cent. of Animists, and 44 per cent. of Pārsīs.

Child-marriage, polygamy, and divorce.

Every Hindu considers that his eternal welfare depends upon his having a son, while the custom of marrying girls at a tender age is very common. Hence arise early and unequal marriages, polygamy, early maternity, a high birth-rate, a terrible mortality among children and child-mothers, early decay in both sexes, and a surplus of widows. Steps have, however, been taken to minimize these evils by the passing of Acts to legalize the remarriage of widows (1902), and to discourage the marriage of infants (1904). The latter measure forbids the marriage of girls under 12, except with the permission of a court, and in the first year of working 718 offenders were fined under its provisions. In such castes as the Audīchya Brāhmans polygamy prevails, because the number of marriageable girls is greater than that of the males. Polygamy is also found among the Rājputs and some other castes. Divorce is allowed among many castes of Hindus, especially the lower ones which permit widow remarriage. Sometimes it is obtained under caste rules, while at other times people resort to the courts.

Language.

Practically the whole population speak languages of the Indo-European family, only 453 speakers of Dravidian languages, 4 of Mongolian languages, and 153 of Semitic languages being recorded. In the first group the number of persons speaking Gujarātī is 1,773,594, Marāthī 38,605, and Hindustāni or Urdū 68,815. There are also many Bhīl and Gipsy dialects, the former being spoken by 68,503 people.

Caste, tribe, and race.

At the latest Census castes were classified, according to the traditional arrangement, in four groups. Brāhmans number 145,000, or 9 per cent. of the total Hindu population. The principal class is that of Gujarātī Brāhmans, who number 128,000. Marāthā Brāhmans are comparatively numerous (14,000). The representatives of the Kshattriyas (106,200) were arranged according to their traditional occupations as warriors (90,500), traders (11,500), and writers (4,200), the first class containing 59,000 Rājputs. Similarly the Vaisyas (459,000) may be divided into Baniās or traders (48,000), and Kunbīs (411,000), who are agriculturists. The Sūdras are divided into 'clean' castes and 'unclean.' Among the former

are found a large number of occupational groups, none of which is singly of great importance except the Kolīs (325,000). More than half the unclean classes are included in the Dheds (94,000). Most of the Jains are Baniās (39,500). The Animists differ in physical type from the Hindus and Jains, being short in stature, with broad flat noses and faces, and much darker in colour. The most numerous of these tribes are the Gāmits (38,200), Bhīls (37,700), Dublās (28,500), and Chodhrās (23,300). Among Musalmāns the most numerous groups are Arabs (29,700) and Shaikhs (56,700), the latter being largely descended from Hindu ancestors.

Occupations.

The Girāsiās, Kāthis, Marāthās, and Wāghers, whose traditional occupation is military service, have maintained this to some extent, but nowadays many have taken to agricultural or other pursuits. The cultivators, who are generally Kunbīs, Kolīs, or Mālis, scarcely ever follow any other occupation. The Rabāris, again, who are graziers and cultivators, remain almost constant to their hereditary employment, only 10 per cent. resorting to other occupations. With the Brāhmans the case is different, as many of the caste have taken largely to agriculture. Most of the Prabhus or writers are employed in service, while about one-third of the Baniās still follow their traditional occupation of trade and commerce, the remainder devoting themselves to service and agriculture.

Of the total population, the number of actual workers of both sexes is about 47 per cent., and of these nearly 68 per cent. are males. Agriculture and pasture support 54 per cent. of the people, the preparation and supply of material substances 14 per cent., unskilled labour 13 per cent., personal services 5 per cent., and commerce 4 per cent.

Social characteristics of the people. Food.

The staple food of the higher-class Hindus consists generally of rice, wheat, pulse, and *bājra*. Vegetables of all kinds are freely used, cooked with *ghī*, salt, spices, turmeric, &c. Cakes made from *bājra* and wheat-flour are partaken of with milk, for both dinner and supper. Among agriculturists, however, the usual food is *khichri* (a spiced mixture of rice and *tuver*) and curry. The poorer classes use *jowār* as their chief food-grain, and also *kodra*, *bavto*, and *banti*.

Dress.

Dhotars or waistcloths form the common dress of Hindus. The upper garments worn by males of the better class are *badans* and *bandis* reaching from the neck to the waist, and *angarkhās* extending as far as the knees. Many educated Hindus, however, now wear shirts, coats, and pantaloons. Females wear *chanias* or petticoat *sāllās*, and *cholīs* or bodices

with sleeves as far as the elbows. The poorer classes do not use *cholīs*.

Houses.

In large towns the dwelling-houses are often situated in court-yards with one entrance only, called *khadkīs*. This was necessitated by the want of safety in former days. The houses of the rich are built of brick, and have usually two storeys and an average of seven rooms. The poor live in mud huts with one floor only, and usually two rooms.

Games and amusements.

The chief outdoor games played by the young people are *gilli-dando*, *attiso-mattiso*, *amla-pipli*, &c. These all involve running and catching, and are very popular. In towns indoor amusements, such as cards, chess, &c., are more resorted to.

Festivals.

The Dewāli holidays, which occur during October or November, are the most noteworthy of the Hindu festivals. The temples are filled with devotees, the people put on their best attire, and the streets and houses are illuminated with lamps. At this time merchants and shopkeepers worship their account-books and open new ones. The Holī takes place in February or March, the Makar Sankrānti in January. Other festivals are the Mahā Sivarātri, the Rāma Navami, and the Janma Ashtami. In the city of Baroda the Muhammadan festival of the Muharram is patronized by the Gaikwār, and many Hindus join in the procession. But the greatest of all attractions to the people is probably the Dasara procession, which generally takes place in October.

Agriculture. Soil and conformation.

The soils are mainly alluvial, except in the hilly parts of the Navsāri and Amreli *prānts*, and in the south-east corner of the Baroda *prānt*, where they are mostly formed by the disintegration of the underlying rocks. These alluvial soils may roughly be divided into *gorāt* or light red (sand and sandy loams), *besār* or mixed (loams), and *kālī* or black. The land is generally flat, here and there relieved by small hills, and in consequence the ground is easy to work. This, however, is not the case in the *rāni mahāls* of the Navsāri *prānt*, which are mountainous, or in the eastern parts of the Baroda *prānt*, which are hilly and wooded. The rainfall in different parts has already been referred to.

Systems of cultivation.

Crops are mainly divided into the 'rains' or *kharīf* crops and the 'dry' or *rabi* crops. The former are sown in June or July, and reaped in October or November; the latter are sown in October or November, and reaped in March or April. In the Navsāri *prānt* the *gorāt* lands produce all kinds of *jarāyat* or 'dry' and *bāgāyat* or garden crops, while the crops raised on black soil are rice, cotton, *jowār*, wheat, *tuver*, *bājra*,

and *adad*. Of these rice and cotton flourish best, the remaining crops being deficient in out-turn and of inferior quality. In the Baroda *prānt* Kāhnam is famous for its superior black soil, which produces cotton and rice in abundance. This soil requires no manure, and is not irrigated, so that garden cultivation does not exist. The *gorāt* soil is generally irrigated, and whenever this is possible it yields large returns. It is specially utilized for the growth of *bājra*. The best kind of *gorāt* is found near Petlād, in Charotar, and is especially suited to tobacco. In the Kadi *prānt* the soil is well adapted for the cultivation of poppy for opium, and in Amreli for the cultivation of cotton. The agricultural implements used in different parts of the State are of simple construction. They include the mattock (*kodāli*), the hoe (*kharpī*), the small plough (*hol*), the large plough (*nāgar*), and the sickle (*dātardu*). The small plough serves only to scratch up the surface of the soil. The *nāgar*, which resembles the *hol* in construction but is much heavier, is employed mostly in the cultivation of sugar-cane.

Implements.

In the whole State 1,014,027 persons, or 52 per cent. of the total, are supported by agriculture, of whom 45 per cent. are actual workers and 55 per cent. are dependents. The proportion is lowest in the Amreli *prānt* (40·7 per cent.), as the soil here is difficult to work. It rises to 66·2 per cent. in Navsāri, because the only pursuit followed by the forest tribes, who are numerous in the *prānt*, is agriculture.

Agricultural population.

The principal crops are rice (*Oryza sativa*), *bājra* (*Pennisetum typhoideum*), *jowār* (*Sorghum vulgare*), wheat (*Triticum sativum*), *math* (*Phaseolus aconitifolius*), gram (*Cicer arietinum*), *adad* (*Phaseolus radiatus*), *tuver* (*Cajanus indicus*), *vāl* (*Dolichos Lablab*), *chola* (*Vigna Catiang*), *kodra* (*Paspalum scrobiculatum*), *nāgli* (*Eleusine coracana*), *bāvto* (*Panicum frumentaceum*), *banti* (*Panicum spicatum*), *vatana* (*Pisum sativum*), *mag* (*Phaseolus Mungo*), castor-oil seed (*Ricinus communis*), *til* (*Sesamum indicum*), rapeseed (*Brassica campestris*), poppy (*Papaver somniferum*), cotton (*Gossypium herbaceum*), *san*-hemp (*Crotolaria juncea*), tobacco (*Nicotiana Tabacum*), sugar-cane (*Saccharum officinarum*), maize (*Zea Mays*), and *kasumbo* (*Carthamus tinctorius*).

Principal crops.

Rice is generally manured with from five to ten cartloads of cattle-dung per *bīgha*[1]. When available, tank mud is used as manure at the rate of ten to fifteen cartloads per *bīgha*. With this treatment, it is calculated that from the best rice soils

Rice.

[1] Seven *bīghas* are equal to 4 acres.

a return of 12 cwt. per acre may be expected. The crop is sown in June and July, and harvested in November.

Bājra. *Bājra*, which is the staple food of the people, is generally sown as a mixed crop, except in Amreli. The land is manured either every year, or every alternate year, with farm-yard manure, at the rate of five or six cartloads per *bīgha*. The average yield per acre is from 5 to 9 cwt. It is sown in June and July, and harvesting begins in October.

Jowār. For the growth of *jowār*, another staple food, five to eight cartloads of cattle manure are applied to each *bīgha*, and the yield varies from 4 to 9 cwt. per acre. It is usually sown in July and harvested from November.

Wheat. In Navsāri wheat is grown without irrigation, while in Baroda, Kadi, and Amreli irrigation is necessary. In Amreli farm-yard manure is directly applied to the land set apart for wheat, but in other parts manure is used only for the *kharīf* crops sown before the wheat. Of this grain there are about five kinds, and the yield varies from 4 to 11 cwt. per acre. It is sown in October and November, and reaped in March.

Gram. Gram is usually sown after the rice has been harvested, and gives an out-turn of from 7 to 11 cwt. per acre. It is sown in November and harvested in March.

Tuver. *Tuver* is generally grown in *gorāt* soil, the average yield being about 5 cwt. per acre. It is sown in June and July, and harvesting begins in January.

Rapeseed. The best kind of rapeseed is grown in Kadi, on land which has been left fallow for four months. It is a crop which does not require any watering, and gives a yield of from 400 to 600 lb. per acre. It is sown in November and reaped in March.

Cotton. It is a general rule when cotton is grown on black soil that the field remains fallow for one year, so that every year in cotton-producing tracts half the cultivable land remains untilled. It is generally sown mixed with rice in Baroda, and after the latter has been harvested the cotton grows rapidly. No manure is required, and the yield is from 4 to 6 cwt. per acre. *Rojī* or indigenous cotton is also grown on *gorāt* soil, and in this case farmyard manure is applied. It is sown in June and July, and picking takes place in February and March, sometimes as early as December, and sometimes as late as April, according to the rainfall.

Sugar-cane. In the growth of sugar-cane a rotation is always observed. Its production so impoverishes the soil that it is not planted again in the same field for at least four or five years. In the

Baroda *prānt* in the monsoon, *san*-hemp or *jowār* is sown as a green manure, and in winter the fields are ploughed and prepared for sugar-cane. In Navsāri and Amreli the method followed is much the same, though the green crops previously sown are different. The juice of the cane is turned into molasses, a product widely exported to all parts of Gujarāt. In Navsāri the canes are cut in November or December after a year's growth.

Tobacco is a staple produce of Petlād and the vicinity. It is grown in *gorāt* soil and requires frequent irrigation, as well as from twelve to fifteen cartloads of farm-yard manure per *bīgha*. In Petlād the crop can be continuously grown on the same field for some years, and then an interval of two years, during which rice or *bājra* is planted, must elapse before tobacco can again be sown. The yield is from 7 to 10 cwt. per acre. It is sown in nurseries in June, transplanted in about a couple of months, and cut in February or March. Tobacco.

Poppy is grown in Kadi. Land intended for this crop is generally left fallow for about four months and ploughed several times before the seed is sown. In some places, however, it is usual to take a crop of *bājra* before utilizing the land for poppy. Manure is applied at the rate of twelve to fifteen cartloads per *bīgha* every third year, and irrigation is necessary. The average yield is estimated at 12 lb. of crude opium per acre, but the out-turn is always a matter of uncertainty, as this crop is easily influenced by changes of weather. Poppy is sown in October or November, and the collection of the juice takes place in February and March. Poppy.

During the rainy season various species of *Cucurbitaceae*, *suran* or elephant foot, sweet potatoes, &c., are grown, but most garden crops mature in the cold season or early summer. Potatoes are planted in small patches near the large towns. They require manure in the form of cattle-dung, oil-cake, and night-soil, and also irrigation. *Brinjāls* and chillies are cultivated wherever irrigation is available, the *brinjāls* of Kāthor being especially famous. Onions are abundant, a white variety being largely cultivated in the Amreli *prānt* at Kodinār. Garlic and radishes are plentiful everywhere. Ginger is largely grown in Baroda and Navsāri. For this crop it is found that bundles of rotten hemp form an excellent manure. Carrots are cultivated everywhere, and in some parts, chiefly in Amreli, are used exclusively for fodder. Various native vegetables are grown in abundance, and of late years tomatoes have been introduced. Among the chief fruits are the mango, Vegetables and fruits.

plantain, pomegranate, pummelo, guava, pineapple, lime, custard apple, fig, and melon.

Statistics of cultivation.

A table attached to this article (p. 59) gives statistics of cultivation for a series of years. In 1904–5 the cultivated area was 3,751 square miles, of which cotton occupied 24 per cent., and *bājra* and *jowār* about 20 per cent. each.

Agricultural department.

A State Agricultural department has been established under a Director to give assistance to the cultivators in all possible ways. A large farm, with a school attached, has been founded at Baroda, where assistant masters of vernacular schools are trained as agricultural teachers in village schools, a few officials are being instructed in the principles of entomological research, and agriculture is taught to ordinary students. At Songarh also a school has been opened, and the farm attached to it is entirely worked by the students. A class for sericulture was opened in 1904. The department also concerns itself with cattle-breeding, and the establishment of seed and manure dépôts. Travelling instructors have been appointed who lecture to cultivators, and endeavour to introduce new crops and improved methods and implements. The most successful innovation so far has been the introduction of the potato, but selected seed of crops already grown is also in demand. A State entomologist was appointed in 1905.

Model farms.

Experiments in agriculture are carried on at the Baroda and Songarh model farms, and occasionally in the fields of intelligent cultivators. At the Baroda farm attention is chiefly paid to the improved growth of the principal crops of the vicinity, and also to the curing of tobacco leaf, while at Songarh *jowār*, rice, and cotton are mostly experimented on. The cultivators take much interest in these farms, and have begun to imitate some of the improved processes followed there.

Agricultural advances.

Advances are regularly made for agricultural improvements, especially the construction of wells. In ordinary years from 1 to 2 lakhs are provided for this purpose, the loans being repayable in thirty years, and no interest being charged for advances of less than Rs. 500. Advances are also made, at easy rates, for the purchase of seed and bullocks, amounting to about $2\frac{1}{2}$ lakhs in 1902–3 and 1903–4. Owing to the unfavourable seasons larger amounts were advanced in 1904–5, the total being 4·8 lakhs.

Agricultural banks.

Agricultural banks have been opened at Songarh (1899) and Harij (1900), which are practically financed and managed by the State. Advances in cash or kind are made to cultivators at the rate of $6\frac{1}{4}$ per cent. interest, and the State profits

are limited to 3 per cent., the surplus being credited to a reserve or distributed as a bonus. The banks also buy and sell produce and agricultural requisites. About Rs. 18,000 was advanced in 1904–5. An Act to regulate the formation of co-operative credit societies has recently been passed.

Indebtedness of the ryots.

The indebtedness of the cultivators is considerable, and few men with average holdings do not owe something to the money-lender. Money is borrowed by the poorer ryots not merely for marriage and other festivals, but also for the purchase of grain and manure. The ordinary rate of interest varies from 9 to 15 per cent. As in British India, the cultivators still deal largely with money-lenders, instead of applying for loans from the State. Advances are regularly given to cultivators of poppy.

Horses. Cattle.

The horses and ponies of the country are very indifferent. The best breeds are to be found in Kāthiāwār. Two breeds of cattle may be mentioned, the *desi* and the *kānkreji*. The former are found in all parts of the Baroda and Navsāri *prānts*. They are of small size, the cows give little milk, and the bullocks, though fast, are unfit for heavy draught. The *kānkreji* breed is well known throughout Gujarāt, and is much esteemed for the size of the bullocks. These large and powerful animals are suited for ploughing and other heavy work. Good bullocks of this breed sometimes sell for Rs. 200 to Rs. 250 a pair. In the Amreli *prānt* the Gir cattle are the most celebrated. They are smaller than the *kānkreji* kind, but the milch cows give a rich and abundant supply of milk. Buffaloes, goats, and sheep are kept everywhere, but there is nothing special to be noted about them. An attempt has been made to improve the breed of buffaloes.

Pasture grounds.

In many villages pasture land is set apart for cattle. Bullocks employed in heavy work are fed on hay, millet stalks, and sometimes gram. Cotton-seed is given to buffaloes to increase the supply of milk. Grass is generally abundant in all parts of the State; but in the recent famines it failed, and many cattle were lost. Fairs are held in a few places for the sale of cattle. The most important is the weekly fair at Baroda.

Fairs.

Cattle-diseases and veterinary dispensaries.

The two most prominent cattle epidemics are rinderpest and foot-and-mouth disease. The former proves fatal in nearly all cases, while the latter is not so dangerous. There are two veterinary dispensaries, at Baroda city and Mehsāna. The surgeons in charge are required to tour when cattle-disease breaks out, and give their advice and assistance. In 1904–5 the total number of animals treated in the dispensaries was 2,049.

Irrigation.

With the exception of the black cotton soil, all the cultivable lands can be irrigated. The chief crops which require irrigation are tobacco, sugar-cane, poppy, and vegetables. Even the black cotton soil repays irrigation if water can be had at moderate depths.

Irrigation works.

The irrigation works constructed by the State include a number of tanks, with small distributing channels. Some of the larger works have not been successful, owing to deficient rainfall or the need for further storage reservoirs and other subsidiary works. The most important is a reservoir at Kadarpur in the Kadi *prānt*, which cost 3·8 lakhs, and will irrigate about 1,500 acres. The largest project is the Orsang weir in the Sankheda *tāluka*, which supplies a canal 6 miles long, and is designed to irrigate 20,000 acres. It has cost 5·2 lakhs up to the present, and the completed works will cost about 20 lakhs. Indigenous irrigation is chiefly carried on by means of wells, as very few tanks hold a considerable supply of water after the close of the cold season. The country is not wanting in streams, but most of them either run dry in the summer months, or fall so low that water cannot be conveyed by canals to the land. The usual water-lift is a large leathern bag containing about 16 gallons of water, which is drawn up by a pair of bullocks moving down an incline. Two men are required, one to drive the bullocks, and the other to empty the bag when it has arrived at the top of the well. The Persian wheel is also occasionally used. Where water is near the surface it is raised in a *supde* or *charaiau*. The former is a rectangular vessel with a rope on each side, worked by two men, who simply scoop the water up. The *charaidu* is a vessel with its length greater than its breadth, and having one end broader than the other. It is fixed on a pivot, and the broad end is lowered into the water and then raised, so that the water flows down. The average cost of a masonry well varies from Rs. 200 to Rs. 2,000, while that of an unbricked well varies from Rs. 10 to Rs. 35, according to the depth of water-level. The total irrigated area is estimated at 184,283 acres.

Indigenous methods of irrigation.

Water-lifts.

Cost of wells.

Irrigation cess.

In addition to the land revenue a cess is levied on irrigation. This takes different forms. In some tracts the cess is levied at varying rates according to the depth of subsoil water. In others all land round a well is charged, while sometimes the rate is paid on the well itself as long as it is used for irrigation. The nominal demand is about 2·7 lakhs, but scarcely half this sum is recovered.

Rents,

The greater part of the State is held on *ryotwāri* tenure, and

the payments made by the cultivators are thus revenue rather than rent. Holders of large areas, however, being unable or unwilling to cultivate the whole of their land themselves, sub-let to others at the highest rates they can obtain. In prosperous years the rents thus paid are sometimes double or treble the State assessment on the land. Persons holding on the *narva*, *bhāgdār*, or *bhārkhali* tenures, described below under land revenue, also collect rent from the actual cultivators. In all these cases rent is sometimes paid in kind, at the rate of one-third or one-half of the crop grown. Wages, and prices. Rent.

Among skilled labourers the carpenter earns the highest wages. At Baroda his daily pay varies from 10 annas to a rupee or more, while elsewhere he receives from 8 to 12 annas. A blacksmith gets from 10 to 13 annas a day at Baroda, and 6 to 9 annas in other parts of the State. A mason can earn daily at Baroda from 10 to 14 annas, or from 8 to 12 annas outside the city. The rates for other classes of skilled labour vary from 4 to 6 annas. Wages of skilled labour. The wages of agricultural labour are fairly uniform throughout the State, varying from 3 to 4 annas a day. Labourers who work as porters earn similar amounts, but at Baroda and other important places, which have railway stations, their earnings often exceed 8 annas. The wages of other labourers vary from 2 to 3 annas a day. Unskilled labour.

Payment of wages in kind still prevails, especially in villages. Agricultural labourers who are permanent servants are provided by their masters with food, clothing, &c., and a small annual cash payment. Casual labour, at the time of weeding and harvest, is in some places remunerated by cooked food once a day in addition to a small cash payment. Again, at marriages or on other occasions villagers often secure the services of artisans and labourers in return for their food and a small money allowance. Payment in kind.

Statistics of prices for a series of years are not available. There is little variation in different parts of the State. The following table gives average prices for the whole State, in seers per rupee:— Prices of staple food-grains.

	Wheat.	Rice.	*Bājra.*	*Jowār.*
1902–3 .	11	9	16	18
1904–5 .	12	9	14	16

As far as material condition is concerned, the people of the *rāsti* (peaceful and populous) *mahāls* of Navsāri stand foremost. There are many well-to-do Pārsīs in this tract. Material condition.

Baroda comes next, while Kadi shows a little inferiority. As usual the Amreli *prānt*, and especially Okhāmandal, is the most backward. A middle-class clerk has a comfortable house, with decent furniture. His food is generally rice, *tuver*, wheat, and *bājra*, and he also partakes of milk and vegetables. His clothing, too, is good. The cultivators are not so well off. Their houses, even though sometimes large, are very scantily furnished and their food is poor. Their dress too is indifferent, consisting generally of *angarkhās* and *badans* (vests), of a coarse cloth called *jota*. The landless day-labourers are the worst off. Their usual food is *kodra* and *jowār*, their dress is ragged, and their abodes are poor.

Forests. Position. The Navsāri *prānt* contains the largest forest tract in the State. Smaller areas exist in Baroda and Amreli. In 1905 the total area 'reserved' was 680 square miles, in addition to which there are considerable stretches of grass land and scrub jungle not yet surveyed. All the forests may be classed

Characteristics. as deciduous and mixed. The most important species of trees are *sāg* (*Tectona grandis*), *shīsham*. (*Dalbergia Sissoo*), *tanach* (*Ougeinia dalbergioides*), *khair* (*Acacia Catechu*), *bia* (*Pterocarpus Marsupium*), *sadad* (*Terminalia tomentosa*), *haladvan* (*Adina cordifolia*), *kalam* (*Stephegyne parvifolia*), *kagar* (*Acacia ferruginea*), *kati* (*Acacia modesta*), *dhaman* (*Grewia tiliaefolia*), *temru* (*Diospyros melanoxylon*), *bandaro* (*Lagerstroemia lanceolata*), *apta* (*Bauhinia racemosa*), *behedo* (*Terminalia belerica*), *kagdoli* (*Sterculia urens*), *babūl* (*Acacia arabica*), and bamboo (*Bambusa arundinacea*).

System of management. Systematic management of the forests commenced in 1877, but the early administration was not successful. More satisfactory results have been obtained since 1891; and the department is now superintended by a Pārsī Conservator trained at Cooper's Hill, who has under him an assistant, a working-plan officer, 7 rangers, 7 sub-rangers, 202 guards, and 15 dépôt keepers. The forests are administered under an Act passed in 1891, and have been completely demarcated and settled. Working plans have been prepared for a large area, and others are being drawn up. The unreserved forests are managed by revenue officials, but the price of certain kinds of trees is credited to the Forest department. Up to 1901 no special steps had been taken for the prevention of forest fires, and though regulations are now in force, little has been done beyond clearing the lines of demarcation and the main forest roads. Artificial reproduction is being tried in a few places; and along the sea-coast at Umrath, in the Navsāri *prānt*,

various trees have been planted to check the spread of sand dunes inland.

'Major' forest produce in areas outside the Reserves is sold by contract, while 'minor' forest products, such as lac, gum, resin, colouring bark, honey, wax, *mahuā* flowers, &c., are collected by lessees. At the several dépôts which have been established permits are issued at fixed rates for the extraction of dry fuel, grass, reeds, bamboos, and other 'minor' produce which is not leased. Grazing is permitted in most of the Reserves, and fees are realized by levying certain rates per head of cattle grazed. Disposal of produce.

Under the rules at present in force every family in forest tracts is entitled to receive annually inferior timber worth Rs. 5 for repairs, and also timber worth Rs. 20 every ten years for reconstruction of huts. The villagers are also allowed fuel, grass, leaves, and thatching materials for their bona fide use, and minor produce for their own consumption, nothing being granted for sale or barter. In return for these concessions the villagers are bound to help the subordinate officials in protecting the forests. Owing to the reckless damage done to the forests in former days, the value of the free grants has been reduced from about Rs. 25,000 to Rs. 8,000. Relations with the people.

In the famine of 1899–1900, when there was no grass available in nearly the whole of Gujarāt and Kāthiāwār, the Songarh and Vyāra Reserves were freely thrown open, and enormous quantities of fodder were supplied to the Baroda and Kadi *prānts*, as well as to Kāthiāwār. In addition to this, about 55,000 cattle were sent from all parts of the State, and even from portions of Rājputāna, to these Reserves for grazing purposes. Similar assistance was given in the bad seasons which followed. Use of forests in scarcity.

The average revenue realized from the forests during the decade ending 1890 was Rs. 70,200, while the expenditure was Rs. 29,500, giving an average surplus of Rs. 40,700. During the next ten years the revenue averaged Rs. 93,400, and the expenditure Rs. 59,600, the surplus decreasing to Rs. 33,800. In 1904–5 the income was 1·2 lakhs, the chief items being produce of clearing and improvement fellings (Rs. 33,400), and bamboos (Rs. 32,100), while the expenditure was Rs. 64,000. Statistics.

Rich magnetic iron-sand is brought down in large quantities by the Tāpti when in flood, and the alluvium deposited on the bank of the river is full of it. The ore seems to have been worked to some extent formerly, but the introduction of cheap iron from Europe has destroyed the industry. The establish- Minerals. Metals.

ment of smelting works in the Songarh *tāluka* has been considered. Traces of gold have been found in the river-beds.

Building materials.

Good sandstone is quarried at Songir on the left bank of the Hiran river, in the Sankheda *tāluka*. The work is carried on by a private company, which pays 2 annas for every large and 1 anna for every small hand-mill stone removed from the quarry, and 12 annas for each cartload of building material. Other kinds of stone are common, but are not worked. Granite of a very handsome variety is found at Virpur in the Kadi *prānt*, and at Bhulwan and Bodeli in the Baroda *prānt*. Crystalline limestone of many colours occurs at Motipura, Harikua, and Wadeli, in the same *prānt*. The green marble of Motipura, when cut and polished, has been described, on competent authority, as the most beautiful marble in India. In Amreli there are practically unlimited supplies of common building stone, such as basalt and miliolite, some of the latter being equal in quality to the best stone obtained in the famed Porbandar quarries.

Arts and manufactures. Weaving.

As in other parts of Gujarāt, the handloom weavers are generally Dheds and Musalmāns, though Khattris, Tais, and Vanjhas also practise the same handicraft. Coarse cotton cloth known as *doti*, *khadi*, or *chophal*, is woven in all parts, the products of the Amreli *prānt* being perhaps the best. They are chiefly disposed of locally, as the erection of steam weaving-mills has almost destroyed the export trade in such material. Efforts are being made to introduce the use of looms of improved patterns. The Khattris of the city of Baroda turn out a rough woollen cloth which is often used for blankets. In the Kadi *prānt* a large number of Musalmān and Hindu women spin cotton thread, which is afterwards woven by Dheds. A more valuable industry is carried on at Pātan, where weavers manufacture *mashrū*, which is exported to Ahmadābād and other places. Silk is also brought to Pātan from Ahmadābād and Bombay, and there woven into *gajis*, *pītāmbars*, and the highly appreciated *patolas*. The sacred threads worn by Pārsīs are largely made at Navsāri by women of the priestly class, and exported to Bombay.

Embroidery and carpets.

At Baroda embroidery with gold and silver thread is undertaken by a few artisans, and the work in both pattern and execution is of a superior description. The Kharadis of Pātan also turn out very good embroidery, while more simple work is prepared at Navsāri. Carpets are made at the Baroda Central jail, and are purchased locally or exported to Ahmadābād, Bombay, and Poona.

Jewellery. There is nothing out of the common in the jewellery made in the State. Goldsmiths are found in every town, and in the marriage season their business thrives greatly. They manufacture ornaments of gold or silver, pearls being freely used in the case of gold ornaments.

Iron-work. The village blacksmith makes and repairs rude agricultural implements, and the wandering Pomalas visit every village to make native weights and the minor cooking utensils. At Atarsumba, in the Kadi *prānt*, knives and frying-pans of good workmanship are produced, and a sword-making industry on a small scale exists at Dehgām in the same division. At Pātan good betel-nut cutters are prepared, which find a ready sale through all parts of Gujarāt. In the Baroda *prānt*, at Sojitrā, Vāso, and Petlād, locks are manufactured.

Brass and copper work. Brass and copper pots for the daily use of the people are manufactured throughout the State, but there is little else worthy of notice. Dabhoi is well-known for the elegance and finish of the articles turned out, and a similar remark may be made of the Kadi brass and copper work. Visnagar also is famous for the excellence of its brass-ware, much of which is exported to Ahmadābād and Kāthiāwār.

Pottery. Earthen jars for holding water or for storing grain, pipe-bowls, and clay toys are manufactured in great quantities for domestic use. The only ornamental pottery is made at Pātan, and this, though thin, light, and fragile, is often pretty. Here are manufactured toys, *hukkas*, water-goglets, pipe-bowls, water-coolers, and similar articles.

Sculpture. The art of sculpture has almost died out, but specimens of stone-carving still existing prove how great was once the excellence attained in this direction. Splendid examples may be seen at Dabhoi, Chāndod, Pātan, Sidhpur, Modhera, and many other places. Though the art has decayed enormously, the stone-carvers of the country have done excellent work in the new palace and other buildings at Baroda.

Wood-carving, &c. Ornamental wood-carving is chiefly confined to the Baroda and Kadi *prānts*. In the former excellent workmen reside at Dabhoi and Sankheda, and fine specimens of their art may be seen on the doors and verandas of the houses. Similar examples may be found at Vāso, Sojitrā, and Petlād. In the palace at Baroda there is much wood-carving which displays the same skill. In Kadi the best wood-carving is found at Pātan, Sidhpur, and Vadnagar. Good turning is also done at Pātan. Work in ivory is carried on to some extent at Baroda and Pātan.

Mill industries. A spinning and weaving-mill was established by the State at Baroda in 1883 at a cost of 6·4 lakhs. It contains nearly 15,000 spindles, 260 looms, and 40 gins. As signs of private enterprise had become apparent, the mill was sold for 5 lakhs in 1905 to a firm which has floated a company to work it. Another mill is approaching completion, and others are projected. Ginning factories number 49 and cotton-presses 4, while there is a single mill for each of the following industries: flour, dyeing, rice, oil, rope, and timber. Chocolate and matches are prepared in private factories. A sugar refinery was worked for some time without success, and was closed in 1894, but has recently been reopened. The total number of hands employed in the mills averaged about 730 during the last decade.

Commerce and trade. The export trade of the State consists mainly of agricultural produce, such as cotton, grain, oilseeds, opium, tobacco, and raw sugar, Bombay being the chief market. Brass and copper vessels are exported from Visnagar and Kadi to Ahmadābād and Kāthiāwār, and the silk fabrics of Pātan are in wider demand. The imports consist of rice and other grains, refined sugar, metals, salt, piece-goods, spices, and kerosene oil. Goods are largely carried by rail, but there is some traffic by sea from the ports of Dwārka, Navsāri, and Bilimora. The harbours at the two last are being improved, and the formation of a harbour at Velam is under consideration.

Trading classes. As traders, petty shop-keepers, money-lenders, and bankers, the Baniās occupy a prominent position. Some of them also trade in cloth, but in this respect the Bhavsars (or Chhīpas) perhaps excel them. Brass and copper vessels are dealt in by the Kansāras. The Gandhis, who are in general Jains, trade in groceries, spices, articles of common use as drugs, and medicines prepared according to native fashion. The sale of vegetables is almost exclusively appropriated by the Kāchhis, while the Ghānchis are dealers in vegetable oil and kerosene. They also sell milk and *ghī*. The Bohrās have a special trade in iron vessels, such as frying-pans, buckets, &c., and in ropes of various kinds, while the petty Bohrās sell every kind of small article. Confectionery is dealt in by the Kandois, and the Tambolis sell betel-leaves, betel-nuts, and tobacco. Corn is sold by Baniās or Ghānchis. They purchase wholesale from the cultivators and then sell by retail in the markets. For molasses and sugar there are always special shops in large centres, but elsewhere as a general rule they are sold by the Gandhis.

Most of the important towns in Baroda territory are either

on the railway, or are connected by fair roads with stations at a very great distance. No railway passes through the Amreli *prānt*, but part of it lies within easy reach of the Bhāvnagar-Gondal-Junāgad-Porbandar Railway. One of the main lines from Bombay to Northern India passes through the State. The southern portion is the broad-gauge Bombay, Baroda, and Central India Railway, which crosses parts of the Navsāri and Baroda *prānts*. From Ahmadābād in British territory this line is continued northwards by the metre-gauge Rājputāna-Mālwā Railway, passing through the Kadi *prānt*. The value to the State of this through route has been greatly increased by the efficient system of branch lines, most of which have been built by the Darbār, though worked by the Bombay, Baroda, and Central India Railway. Exceptions are the Tāpti Valley Railway, constructed by a company, which crosses portions of Navsāri from west to east, and the Baroda-Godhra chord line, which is part of the Bombay, Baroda, and Central India system. The Baroda *prānt* is well served by the Gaikwār's Dabhoi Railway ($2\frac{1}{2}$ feet gauge), which branches south to Chāndod, east to Bodeli, west to Miyāgām, and north-west to Vishwāmitri, the two last places being on the Bombay, Baroda, and Central India main line. Another branch passes south-west from Vishwāmitri to Masor Road. The total length of this system is 95 miles, and its cost to June, 1905, was 24·4 lakhs. The net earnings yielded 5 per cent. on the capital cost in 1904. The outlying *tāluka* of Petlād is crossed by the broad-gauge line from Anand to Cambay, 22 miles of which belong to the State, and yielded a profit of nearly 6 per cent. on the capital cost of 11·5 lakhs in 1904. In the Kadi *prānt* the Gaikwār's Mehsāna Railway radiates from Mehsāna north-west to Pātan, north-east to Kherālu, and south-west to Viramgām, with a total length of 93 miles. The capital cost of this system was 34·2 lakhs to June, 1905, and in 1904 the net profit was 6 per cent. Another metre-gauge line, 41 miles long, passes south-west from Vijāpur to Kalol on the Rājputāna-Malwā Railway, and then west to Kadi. It has cost more than 13 lakhs, and yielded a net profit of 3 per cent. in 1904.

Means of communication. Railways.

The railways constructed by the Darbār have increased in length from 113 miles in 1891 to 185 in 1900 and 250 in 1905. The total capital cost was 83 lakhs, giving an average of Rs. 33,000 per mile, and the net profit was 5·3 per cent. in 1904. Cotton, grain, salt, oilseeds, and sugar are the principal commodities carried.

General results.

Good roads are not numerous in Baroda, owing to the great

Roads.

expense involved in construction and up-keep, and it is probably cheaper, and certainly more effective, to make narrow-gauge railways. The main roads are the Bombay-Ahmadābād or old trunk road, passing through the Gandevi, Navsāri, and Velāchha *tālukas*, and the Bārdoli-Surat road. Feeders connect important towns with railway stations, and a few miles of metalled road have been made in and around the capital. The up-keep of village roads has recently been entrusted to local boards.

Type of carts, &c.

The usual conveyance, as throughout Gujarāt, is a large wagon called *gadu*, the general pattern of which is everywhere the same. It is simply a long cart with a yoke in front, movable sides, and two wheels, usually but not always tired. Another type, called a *damania*, is about half the length of the *gadu*, and is chiefly used for passengers, of whom it can convey four or five. It is usually drawn by two bullocks, but sometimes one only is used, and then the conveyance is called an *ekka*. Closed carriages, called *shigrams*, are used by wealthy people in large towns.

Ferries.

In connexion with the chief lines of traffic through the country, there are ferry-boats in many places in Baroda territory, some belonging to private owners, others to the State. The Mindhola river is crossed by four ferries, and the Ambikā by three. The Tāpti has eight, the Narbadā thirteen, the Mahī seven, the Vishwāmitri two, the Sābarmatī one, while in Okhāmandal there are ten.

Post and telegraphs.

Postal arrangements are entirely under British jurisdiction, the State forming part of the Bombay circle. Telegraph offices have been opened in all the large towns. The following statistics show the postal business in the State for the year 1904–5:—

Number of post offices	203
Number of letter-boxes	563
Number of miles of postal communication	967¼
Total number of postal articles delivered:—	
Letters	2,222,928
Post-cards	5,450,545
Packets (including unregistered newspapers)	235,738
Newspapers (registered as such in the Post Office)	338,225
Parcels	23,021
	Rs.
Value of stamps sold to the public	1,33,416
Value of money orders issued	16,26,490

Famine. Liability to famine.

When there is scarcity of rain, the liability to famine varies in different parts according to the means of irrigation. Thus

the *rāni mahāls* of Navsāri, with a stony and inferior soil, suffer as there is no possible way of irrigating the land. In the Kāhnam and Chorāsi tracts of Baroda wells can only be made with great difficulty, owing to the prevalence of black soil. Most of the Kadi *prānt* is suitable for the sinking of wells, the exceptions being portions of the Pātan and Sidhpur *tālukas*, the *peta mahāl* of Harij, and the neighbouring parts of the Kadi and Vadāvli *tālukas*, a part of the Kalol *tāluka*, the *peta mahāl* of Atarsumba, and the tract of country through which the Sābarmati flows. In Amreli the country bordering on the Gir, the southern portion of the Dhāri *tāluka*, and the northern part of the Kodinār *tāluka* have few wells, while on the sandy and almost rainless promontory of Okhāmandal both soil and climate seem to combine to forbid cultivation.

The records of early famines are very scanty. There was certainly a great famine in 1791, and another in 1812–3, which prevailed most severely in Kadi and Amreli. In 1819, 1834, 1838, 1877, and 1896 scarcity was experienced in portions of Baroda territory. Previous famines.

In consequence of the failure of the rains in 1899 the whole of Gujarāt fell a prey to the most terrible famine within the memory of living men. In June the usual showers of rain fell in all parts of the State, and the first agricultural operations were carried out. But three months followed without rain, and all hopes for the year disappeared in October; numbers of cattle died in that month, prices rose very high, and a period of disaster set in. The total rainfall varied from 13 to 34 per cent. of the normal in most parts of the State. Up to February, 1900, the Navsāri *prānt*, which had received about 34 per cent. of the normal rain, was considered free from famine; but an area of 6,245 square miles, with a population of 2,095,953, was severely affected from the beginning of the year. Famine of 1899–1900.

The crops failed entirely in every part, and fodder was soon exhausted except in the forest tracts of the Navsāri *prānt*. The prevalence of famine in the Deccan, Rājputāna, Central India, and other parts added to the distress, for the prices of *bājra* and *jowār* doubled. Wheat rose by only 60 per cent., and the price of rice was in some measure kept down owing to large importations from Rangoon. Rise of prices.

Extensive relief measures were undertaken by the State. Gratuitous relief was granted to those unable to work, 6·4 million units being aided at a cost of 2·6 lakhs. In addition, 4·6 million units were relieved by private charity at a cost of Relief and protective measures employed.

2·5 lakhs. Cheap grain-shops were also opened and poor-houses established. Relief works were opened in many places, some of which were large protective irrigational works, such as the Kadarpur reservoir, the Orsang irrigation scheme, a new feeder for the Ajwa reservoir, tanks at Karāchia and Haripura, and drainage works at Sandesar and Karamsad. Roads and railway earthworks were also used to provide relief. The number of units on works was 19·2 millions, and the expenditure was 19·4 lakhs. Advances were freely made to agriculturists, amounting to 15·2 lakhs. The preservation of cattle was effected to some extent by giving free grazing wherever it was available, by the stoppage of the sale of grass on pasture lands, by the removal of duties on cattle-food, by the encouragement of the growth of fodder-crops, and by the direct supply of grass. The total quantity of grass so supplied amounted to 3,255 tons, and the cost was a lakh. Wells were sunk, specially in the Kadi division, at a total expenditure of 12·2 lakhs, and with the water so obtained fodder-crops were raised. The total expenditure during 1899–1900 on account of this great famine was 46 lakhs.

Later scarcity.

In the next three years the rainfall was unsatisfactory, and the whole country was infested with rats, which destroyed the crops wholesale. Considerable expenditure was required, amounting to 60 lakhs, of which 26 lakhs was spent on works and 16 lakhs on advances. In 1904–5 scarcity was again felt, and relief measures were required at a cost of 10 lakhs, including advances of 7 lakhs.

Effect on population.

As the registration of births and deaths has only recently been organized, statistics of the effect on population are not very reliable. During the famine year the number of deaths recorded was 131,261, while the average mortality of the previous five years was only 42,723. The deaths are attributed to the following causes: cholera, 21,986; fever, 73,294; dysentery and diarrhoea, 8,560; other causes, 27,421. According to the famine report for the year 1899–1900 the number of deaths due to famine causes alone, to the end of July, 1900, was 68,674.

Administration.

The State is in direct political relation with the Government of India, all communications passing through the Resident.

The administration is carried on by an executive council, subject to the control of the Mahārājā, who is assisted by a Dīwān and other officers. A number of departments have been formed, which are presided over by officials corresponding

to those in British India, the principal heads of departments being members of the council. The Revenue, Financial, and Settlement departments are at present controlled by Mr. R. C. Dutt, a retired Indian Civilian. Other departments deal with public works, medical, education, police and jails, judicial, military, records, and palace.

Administrative divisions.

The State is divided into four *prānts*, corresponding to the Districts of British territory, and each *prānt* is subdivided into *mahāls* or *tālukas*, which number thirty-three, besides a few *peta mahāls* or sub-*tālukas*.

A *Sūbah* or Collector is in charge of each *prānt*, with an Assistant called the *naib-sūbah*. A *vahivātdār* or *tahsīldār* is in charge of each *tāluka*. Corresponding to the Commissioner in British India is a *Sar-sūbah* who supervises the work of the *Sūbahs*, and is subordinate to the Revenue Minister. For some years attempts have been made to restore village autonomy, and since 1902 a *panchāyat* has been formally constituted for each village with a population exceeding 1,000, smaller hamlets being grouped together. The number of members varies from five to nine, half being appointed by the district officials and half selected. The *pātel* or headman is president, and the accountant and schoolmaster are members *ex officio*. These bodies are in charge of various details connected with the administration, and form part of the scheme for local self-government, which is described below.

Legislation and justice.

Before the administration of the present Mahārājā there were few published codes in force, and these dealt chiefly with civil and criminal procedure, stamps, and registration. In 1883 a law committee was constituted, consisting of the Naib Dīwān and the three Judges of the High Court. The committee was replaced in 1904 by a Legislative department, under a Legal Remembrancer. Bills are published in the official *Gazette*, and after consideration of the criticisms made by the public and officers of the State become law under the orders of the Mahārājā. The chief measures passed since 1884 are: Acts dealing with Police (1884 and 1898), Registration (1885 and 1902), Excise (1886 and 1900), Stamps (1889 and 1904), Small Cause Courts (1890), Municipalities (1892), Law relating to possession (1895 and 1897), Court fees (1896 and 1904), Civil Procedure (1896, 1902, and 1904), Easements (1896), Limitation (1896 and 1903), Penal Code (1896 and 1904), Criminal Procedure (1896 and 1904), Interest (1898), Inspection of Boilers (1898), Contracts (1898), Guardians and Wards (1898), Lunatic Asylums (1899), Arms (1900), Transfer of Property

(1901 and 1902), Hindu Widow Marriages (1902), Opium (1902), Village Munsifs (1902), Primary education (1904), Infant Marriage Prevention (1904), Local Boards (1904–5), Co-operative Credit Societies (1904–5), Religious Endowments (1904–5), Charitable Estates (1904–5), and Customs (1904–5).

Courts of justice.

Till recently the subordinate revenue officials exercised magisterial powers, resembling those of a magistrate of the second or third class in British India. Since 1904, however, the *vahivātdārs* have been relieved of criminal work in almost every *tāluka*, and cases are now tried by the Munsifs or subordinate civil officers. *Naib-sūbahs* or *Sūbahs* have first-class powers, and the latter can transfer cases from one subordinate court to another.

The lowest civil courts of first instance are those of the *mahāl* Munsifs, who can usually hear suits up to Rs. 7,000, and Small Cause suits up to Rs. 100 when sitting alone, and up to Rs. 300 when forming a bench with another Joint Munsif or a *panchāyat*. A few Village Munsifs have also been appointed. The Munsifs have criminal jurisdiction as magistrates of the first class.

The *prānt* Judges try original civil suits up to any amount, hear appeals from the Munsifs' decisions, and try Small Cause suits up to Rs. 750 when alone, and up to Rs. 2,250 when forming a bench with another Judge or with a *panchāyat*. In criminal cases they can sentence to imprisonment for life, subject to the sanction of the High Court, and to death, subject to the sanction of the Mahārājā. In certain classes of criminal cases the trial is conducted with the aid of assessors, and the adoption of a jury system is under consideration. A separate *prānt* Judge was appointed for Baroda city in 1905.

The High Court.

The chief tribunal is called the *Varishth* or High Court, and sits at Baroda. It possesses jurisdiction over the whole of the State, and hears all final appeals in civil and criminal cases. The Judges of this court, who are three in number, besides the Chief Justice, have also extraordinary powers to try an original case. Death sentences, however, are subject to confirmation by the Mahārājā, who can also modify any order passed by the court.

Sardārs' Court.

A special court, for the trial of civil and criminal cases affecting certain privileged persons, such as *sardārs* and *darakdārs*, sits at Baroda, and is known as the Sardārs' Court.

Minor offences.

Minor offences with regard to sanitation, petty quarrels, &c., are disposed of by the village *pātels*, who can fine up to Rs. 5, and inflict 48 hours' imprisonment in the village lock-up.

Cases of theft and robbery are more frequent than any others, and offences against the person rank next, although murders and other cases of grievous hurt are not prevalent. Offences against public tranquillity are comparatively rare. The following table gives statistics of crime and litigation for a series of years:— Nature of crime.

CRIMINAL AND CIVIL JUSTICE

	Average for ten years ending 1890.	Average for ten years ending 1900.	1901.	1904-5.
Criminal.				
Number of persons tried	21,404	30,816	22,680	22,295
Civil.				
Suits for money and movable property	14,912	20,596	13,450	11,904
Title and other suits	809	1,903	1,341	1,200
Rent suits	188	365	736	501
Total	15,909	22,864	15,527	13,605

A Registration department was formed in 1885. In the decade ending 1900 the number of offices was 48, and the average number of documents registered was 15,945. In 1904-5 there were 49 offices, and 20,641 documents were registered. Registration.

The department of Finance and Accounts is usually controlled by an Accountant-General, and is modelled on the system in force in British India. In addition to the usual detailed examination of accounts at the head office, the officials of the inspection branch tour and examine the working of all disbursing offices, and check cash balances and stock. Finance.

The main items of revenue in the Baroda State are land revenue, tribute from other Native States in Gujarāt and Kāthiāwār, opium, excise, stamps, and railways. The main items of expenditure are the palace, civil establishments, army, public works, police, and education. Revenue and expenditure.

The table on the following page shows the revenue and expenditure for a series of years, in thousands of rupees.

The disastrous famine year and its successor account for the diminished land revenue in 1901, and the increase of expenditure, due chiefly to protective relief works, in the same year. The large decrease in land revenue in 1904-5 is due to remissions and suspensions owing to scarcity.

The tributes from feudatory chiefs in Kāthiāwār, Rewā Kāntha, and Mahī Kāntha are chiefly collected by the British

Government and are paid through the Resident. In 1904-5 they amounted to 5·9 lakhs.

State Revenue and Expenditure

	Average for ten years ending 1890.	Average for ten years ending 1900.	1901.	1904-5.
Revenue.	Rs.	Rs.	Rs.	Rs.
Land revenue	1,01,26	97,09	87,69	58,03
Stamps	3,02	5,81	5,93	4,12
Customs (land, sea, and town duties)	10,32	7,60	6,71	5,36
Miscellaneous taxes	3,43	2,66	1,57	1,61
Forests	63	1,08	76	1,12
Registration	39	51	51	64
Other sources (chiefly tribute, excise, railways, opium, and interest)	40,38	50,11	33,44	42,93
Total revenue	1,59,43	1,64,86	1,36,61	1,13,81
Expenditure.				
Collection of land revenue, &c.	19,38	28,68	27,11	21,33
Huzūr office establishment	5,04	5,13	5,24	4,96
Judicial establishment	3,20	3,82	4,00	3,10
Police	8,51	7,74	7,86	7,32
Education	2,73	7,95	8,07	6,74
Medical	1,59	2,07	2,18	1,64
Minor civil departments	7,22	7,74	8,19	15,92
Pensions, &c.	9,97	10,60	8,77	7,33
Public works (including irrigation and famine relief)	18,25	21,88	34,20	16,29
Other charges (chiefly palace and military)	75,12	74,59	[illegible]3,62	61,23
Total expenditure	1,51,01	1,70,20	1,79,24	1,45,86

Currency.

The earliest coin struck in the Baroda State was issued, nominally under the authority of Shāh Alam II, at the close of the eighteenth century. Subsequently the Darbār issued its own money. The silver coins were called *bābāshāhi* rupees, and the copper coins Baroda pice, and all were executed in the rudest manner, except the latest issue of the present Mahārājā. This currency did not, however, circulate in all parts. In Navsāri and Amreli British coin was used, while in Kadi *shikai* rupees were current till 1896, when *bābāshāhi* rupees were substituted. Great inconvenience was caused by fluctuations in exchange, and British currency was introduced in 1901. The only trace still left of the old currency is in the Baroda *prānt*, where Baroda pice are still in use.

Land revenue.

A large proportion of the land has been alienated. These alienations extend not only to portions of the *khālsa* or State

villages, but also include whole villages, of which about 8 per cent. have been alienated. A general term applied to such lands is *bhārkhali*, the expression meaning those of which the produce is not brought into the State *khala* or 'grain-yard.' Prominent among the holders of such land are the Girāsiās, whose ancestors held estates under the Mughals, or rose into power subsequently. Some Girāsiās are entitled to cash payments only, while others hold land and receive allowances as well. Land which is exempted from assessment is called *nakari*, and includes *dharmādaya*, *devasthān*, and *pīrasthān*, or lands for the support of charitable institutions, or to maintain religious establishments. *Chākaryat* lands are those granted in lieu of cash for services rendered to the State, and the occupants have no power to sell, mortgage, or otherwise dispose of them. *Pasaita* lands are free grants to the different orders of village servants in Gujarāt. There are also *ināmi* grants and alienations given as rewards for services, military or civil, and many less important classes of tenure. Since 1880 alienations have been more carefully supervised than was usual in the past. Alienated land.

The principal tenure in the *khālsa* area is *ryotwāri*, under which the State collects the revenue directly from each cultivator without the intervention of a third party. The land revenue is chiefly assessed in cash on the area of the land occupied, but in a small and backward tract it is still levied on the number of mattocks used. This tract is now confined to one corner of the State and is mostly forest land. The cultivators have full rights of sale and mortgage; but if a holding is sold in execution of a decree, sufficient land is reserved for the subsistence of the cultivator and his family.

Two tenures, which resemble to some extent the *zamīndāri* tenure of Northern India, are called *narvadāri* and *bhāgdāri*. The latter has practically disappeared. In the former a lump assessment is made on a whole village, on general considerations, and the *narvadārs* are left to make their own terms with the actual cultivators. As a rule, they set aside a portion of the village the produce of which meets the State demand. While nominally allowed to alienate their rights, they remain responsible for the full assessment. Under the *ankadabandi* and *ekankadi* tenures a lump sum is assessed on a whole village, and the cultivators are left to distribute the demand among themselves. The assessment is subject to revision in the case of the former, and is permanently fixed in the latter class.

Settlement.

Under the Marāthās tracts of land were leased to farmers,

who extorted as much as they could from the cultivators. In 1864 Khande Rao commenced a scheme for settlement resembling that in the adjacent parts of Bombay. He also substituted payments in cash for division of the produce, and established a State service for the collection of revenue. The system was hardly successful, as the survey was incorrect, and the assessment was largely guess-work, while the tendency to pitch it too high was increased by the temporary demand for Indian cotton during the American Civil War. About ten years later, Sir Mādhava Rao reduced the demand by 12 lakhs; and in 1883 a new survey and settlement were commenced under an officer of the Indian Civil Service. Operations were modelled on those followed in Bombay. The demand for a whole *tāluka* was fixed on consideration of the fiscal history of the tract, and was then distributed after careful classification of the land according to its capabilities. The total demand was still further reduced by 8 lakhs, and the assessment was fixed for a period of fifteen years. A number of taxes on agriculturists were at the same time abolished. In 1904 the revision of this settlement commenced, also under the control of an officer of the Indian Civil Service, and it has been decided to fix the term of assessment at thirty years.

Miscellaneous revenue. Opium.

Trade in opium is a monopoly of the State, and no cultivator is permitted to grow poppy without a licence. A special agency is maintained for supervising and regulating the growth of the plant, and the subsequent manufacture of opium. At present cultivation is confined to the Kadi *prānt*. Licences are issued by the *vahivātdārs* or the opium superintendent to cultivators, who send their applications through the village accountants. Opium is collected from the cultivators at fixed places from April to June, and they receive payment immediately, at a rate fixed beforehand, which was Rs. 6 per seer in 1904–5. A sufficient quantity is reserved for use in the State, and the balance is sent to Bombay for sale in China. The latter is packed in chests containing 140¾ lb. or half-chests of 70⅛ lb., and is subject to a transit duty at present amounting to Rs. 600 per chest, collected by the British Government at Ahmadābād. Retail sale within the State is effected by licensed vendors. In Navsāri and Amreli the contract for sale throughout the whole *prānt* is disposed of by auction, while in Baroda shops are let separately. In Kadi a selected licensee receives the contract. The area under poppy averaged 8,166 acres during the decade ending 1890, 6,223 acres during the following ten years, and was 6,973 acres in 1901 and 12,262

acres in 1904–5. The net revenue averaged 3·3 lakhs from 1881 to 1890, and 4·1 lakhs in the next decade. In 1904–5 sales within the State realized a net profit of 2·5 lakhs, and 800 chests were exported at a profit of 3·2 lakhs. Many causes affect the popularity of the cultivation. The poppy is a difficult plant to bring under culture. It requires constant care and attention, and all the processes connected with it entail much labour. Rapeseed, wheat, and other crops compete with poppy. The price to be offered by the State is notified before issuing licences, and the people make a choice according to the conditions of the season. **Causes affecting popularity of the cultivation.**

Salt. The manufacture of salt is carried on only in Amreli. The product is sold in this *prānt*, and cannot be exported to other parts of Baroda or to British India. Salt made at Kodinār is a State monopoly; but no restrictions are in force at Okhāmandal, except the levy of an export duty on salt exported to Zanzibar and other foreign ports. In the rest of the State salt may not be manufactured. In 1904–5 the State realized Rs. 573 from export duty, and Rs. 348 from the monopoly, while it spent Rs. 230 on the latter and Rs. 864 on preventive establishment.

Excise. The principal sources of excise revenue are the manufacture and sale of country liquors and toddy, *bhang*, *gānja*, and other intoxicating drugs, and fees for licences for the sale of imported foreign liquors. In Amreli the out-still system is in force, under which the rights to manufacture and sell liquor are sold together. In other *prānts* liquor is manufactured at a central distillery, still-head duty being levied at rates varying from 6 annas a gallon for liquor at 60° under proof, to Rs. 2–8 for liquor 15° under proof. Licences for retail vend are sold by auction. Toddy is sold in shops which are let singly or in groups of licensed vendors, and in addition a tree tax is levied. It is important only in Baroda and Navsāri. Licences for the sale of imported liquors are given at fixed annual rates, varying from Rs. 75 to Rs. 125. The excise revenue during the decade ending 1890 averaged 5·44 lakhs, and during the next ten years 8·5 lakhs. In 1901 the revenue was 5·8 lakhs, and in 1904–5, 6·8 lakhs. The chief heads of receipts in the latest year were 5·8 lakhs from liquors and Rs. 93,000 from toddy. The incidence of receipts per head of the population was R. 0–1–9 in 1881, R. 0–5–5 in 1891, R. 0–4–8 in 1901, and R. 0–5–6 in 1904–5. The Marāthās, Kolīs, and labouring Hindus, the Pārsīs, and some of the Muhammadans consume country liquor, but as usual the greatest demand is in the **Use of liquors, &c.**

capital and chief centres. In Navsāri there is a large consumption of toddy, because of the numerous palms that grow there, and the superior nature of the manufactured drink. *Bhang*, *gānja*, &c., are not used nearly so freely as liquor. The higher classes are as a rule strongly averse to the use of liquor, though some educated people take a stimulant in case of illness. The wealthier part of the community, as for instance the Pārsīs, prefer imported spirits to the coarser country brands.

Stamp revenue.

The Stamp department is conducted on methods analogous to those obtaining in British territory. Various kinds of stamps and stamped paper are supplied to selected vendors, who sell by retail to the people, and obtain a commission from the State. The revenue derived from stamps during the decade ending 1890 averaged 3 lakhs, and during the next ten years 5·8 lakhs. In 1901 it was 5·9 lakhs, and in 1904–5, 4·1 lakhs.

Income tax, &c.

Till recently a number of vexatious taxes were levied on professions and castes, forming 214 classes in 1905. They yielded only about Rs. 85,000, and have been replaced by an income tax, first levied, in part of the State, in 1901–2. The latter is assessed at about 1 per cent., incomes of less than Rs. 300 per annum being exempted. The revenue in 1904–5 was Rs. 99,000. An income of about a lakh is derived from rents paid for homestead land by non-agriculturists, licences to collect valuable shells, and taxes on pilgrims.

Customs.

Important reforms have recently been made in the customs administration, which were formerly complicated and harassing to trade. In 1904 the frontier duties hitherto imposed in the Baroda and Kadi *prānts* on 28 articles were abolished, leaving 8 on the schedule, and a similar reduction was made in the duties levied in towns, while export duties were remitted, except in the case of cotton and *mahuā*. At the same time the assessment was simplified by levying it by weight, instead of *ad valorem*. A year later similar reforms were introduced in the Navsāri and Amreli *prānts*, and in addition octroi was completely abolished in several small towns. The customs revenue during the decade ending 1890 averaged 10·3 lakhs, and during the next decade 7·6 lakhs; in 1904–5 it amounted to 5·4 lakhs. In the latest year the expenditure on establishment was Rs. 80,000.

Local and municipal.

A scheme for local self-government came into force in 1905, when a *tāluka* board was constituted in each *tāluka* and a District board in each *prānt*. Groups of villages and each municipality return a member to the *tāluka* board, half the

members of which are thus elected, the other half being nominated by the State. Half the members of the District board are similarly elected by *tāluka* boards and large municipalities. Alienated villages are also represented on both District and *tāluka* boards. The *Sūbah* presides over the latter, and the *naib-sūbah* over the former. A local cess is levied at the rate of one anna in the rupee on land revenue, but has not yet been extended to the whole State. From the proceeds a quarter is set apart for famine and other unforeseen expenditure, and the balance is placed at the disposal of the boards, amounting to 2·8 lakhs in 1905–6. Further grants are made for public works, vaccination, and village schools, the total income being 4·5 lakhs. The boards' functions resemble those entrusted to similar institutions in British India, such as public works, schools, temporary dispensaries, vaccination, sanitation, and arboriculture.

In 1877 municipalities were established in all towns containing a population of 10,000 people and over, excepting Dwārka, and grants were made by the State at the rate of 4 annas per head of population. The grants sufficed only for a limited attention to conservancy, lighting, watering, &c., and were subsequently raised to 8 annas per head for all towns where the population is more than 7,000, and 6 annas per head in other cases. Municipalities were subsequently established in twenty-two other towns with a population of less than 10,000. From 1899–1900 (famine year) the grants were reduced to 4 annas, except in Pātan. In 1905 separate sources of income were assigned to some municipalities. Thus Baroda city received a grant of 1·3 lakhs and the net receipts from octroi, while custom duties, tolls, local cess, and a proportion of the excise revenue raised in them were handed over to seven other towns, the ordinary grant being reduced or abolished. In 1905 there were altogether 35 municipal towns: Baroda city, with a population exceeding 100,000; 10 with more than 10,000 and less than 100,000; and 24 with less than 10,000. The total population within municipal limits was 412,626.

Constitution of the municipalities.

With the exception of Baroda city and seven other towns, the *Sūbah* appoints not less than half the members, who are from eight to sixteen in number, and hold office for three years. In making his nominations the *Sūbah* is expected to take into consideration the different castes of the inhabitants, and the nature of the trade carried on in the town. He can also appoint State servants, such as members of the Medical

and Educational departments. In the more important towns, *naib-sūbahs* help in the administration, and in the *tāluka* towns the *vahivātdārs*. In 1905 a scheme was introduced by which half the members are elected in the seven towns referred to above. The principle of election has been introduced to a certain extent in other municipalities also.

The following table shows the expenditure of the municipalities, excluding Baroda city:—

	1889-90.	Average for the ten years 1891-1900.	1900-1.	1904-5.
	Rs.	Rs.	Rs.	Rs.
Establishment	Details not available	Details not available	15,687	12,504
Public works			10,271	13,224
Planting of trees			191	202
Conservancy			57,825	48,630
Watering roads			3,480	2,377
Lighting			13,496	13,582
Fire establishment			579	918
Tools and plant			776	1,378
Miscellaneous			1,226	4,736
Total	70,812	123,194	1,03,531	97,551

In Baroda city the expenditure was 3·4 lakhs in 1889-90 and 1900-1, and 2·4 lakhs in 1904-5.

Public works.

The Public Works department, which came into existence in 1875, is under the control of the Chief Engineer, the administrative part of the work being conducted by a Secretary in the Public Works department, who is of the rank of Executive Engineer. Five divisions have been formed for the *prānts* and Baroda city, at the head of each being an Executive Engineer with a qualified staff under him. There is a separate Executive Engineer for Irrigation. It has also been found necessary to make a separate branch for landscape gardening, and to appoint at its head a European Garden Superintendent, who reports directly to the Chief Engineer.

Expenditure.

During the decade 1881-90 the expenditure averaged 16·7 lakhs, while in the next ten years it rose to 18·3 lakhs. In 1904-5 it amounted to 20·1 lakhs, including 2 lakhs for famine relief. These sums do not include expenditure on the railways, which were not constructed by the department.

Works of construction.

The following are the principal works that have been carried out since the accession of the present Mahārājā:— The Dufferin, Jamnābai, and Military Hospitals, and a Lunatic Asylum at Baroda city, and 4 hospitals and 25 dis-

pensaries in the districts; a college, Anglo-vernacular school, and female training-college at Baroda, a high school at Amreli, and about 50 other schools; public offices at Baroda, Navsāri, Amreli, and Mehsāna; a survey office and record office at Baroda; judicial courts and a Central jail at Baroda, and 4 district jails; a public park and museum at Baroda; cavalry and infantry lines, with officers' quarters at Baroda; the Ajwa reservoir and city drainage works for Baroda, and drainage and irrigation works in the districts; a lighthouse at Dwārka; roads from Baroda to Ajwa and Amālyāra, Petlād to Cambay, Sinor to Karjan, Pātan to Harij, Bilimora to Gandevi, Songarh to Surat, Amreli to Chital, Dwārka to Koranga, and many others of short lengths. In addition, the magnificent Lakshmī Vilās palace at Baroda, and a palace at Umrath, have been constructed departmentally.

Army. The State army, consisting of the regular and irregular forces, is under the command of the Senāpati, who is assisted by the Military Secretary. The regular forces include artillery, cavalry, and infantry, whose total strength in 1904–5 was 4,775 officers and men. The artillery forms a light field battery, 93 strong. There are four cavalry regiments, with a total strength of 1,500 men, and four infantry regiments with 3,182, the balance being made up by staff officers and the band. The irregular forces are also divided into horse and foot, the former numbering 2,000 and the latter 1,806. The total cost in the same year was 17·9 lakhs, of which 10·6 lakhs was spent on the regulars, 6·5 lakhs on the irregulars, and the balance on pensions. In addition, the State pays 3·7 lakhs annually to the British Government as commutation for the maintenance of the former Baroda Contingent, making a total military expenditure of 21·6 lakhs. A regiment of native infantry of the Indian Army garrisons Baroda, which is a cantonment in the Mhow division of the Western Command.

Police and jails. Before 1860 the police administration was in the hands of the revenue farmers, who were permitted to exercise magisterial and police functions. The system was unsatisfactory, and consequently numerous changes and improvements were made; but the first thorough reform was introduced by Sir T. Mādhava Rao, who separated the work of the magistrates from that of the police.

Organization. The present organization of the regular police is as follows. At the head of the department is a Commissioner. Each *prānt* is under a district police officer, who is called police *naib-sūbah*, corresponding in rank with the District Superin-

tendent, and has under him a varying number of inspectors. The inspectors are in charge of subdivisions, which consist of three or more *tālukas*. Each *tāluka* has a *faujdār* (chief constable). A *tāluka* is subdivided into *thānas* (outposts), each *thāna* containing a certain number of villages. Large and important *thānas* have *chaukīs* under them for a small group of villages. The *thānas* are under *naib-faujdārs*, and the

Strength.

chaukīs under *havildārs* or *jemadārs*. The sanctioned strength of the regular force in 1904–5 was 4,886, made up as follows: 60 officers, 4,622 subordinate officers and men, and 204 mounted police, besides 129 non-effectives. The actual strength was 4,660, and the total cost was 6·4 lakhs. The sanctioned strength allows one man of the regular police to every 2·9 square miles of country, and to every 690 inhabitants. The rural police are said to number about 10,000 men. These latter are, strictly speaking, subordinate to the village *panchāyats*, but in criminal cases must give assistance and report to the regular police.

Recruitment and training.

The system of recruitment of the regular police is almost the same as in British territory. Recruits must be men of good character, with a height not less than 5 feet 5 inches, and circumference of chest not less than 31 inches. After enlistment each recruit is trained at the head-quarters of the division for at least six months, and is taught drill and the use of the rifle. Those who cannot read and write receive oral instruction in their duties, and manuals are provided containing the chief points of the Police Act and other regulations. In 1904–5 about 63 per cent. of the force could read and write. Educated men have not shown much desire to enter this department, but a change seems to be setting in, and at the present time there are even a few graduates in the service. The pay of the force has recently been raised.

Special questions.

Except in the city of Baroda there is no special branch for detective service. To aid in the detection of crime, the system of taking finger-prints was introduced two years ago

Railways.

and is now being developed throughout the State. Police on the State railways are under the control of the Police Commissioner, except on the Dabhoi Railway, which is under the Superintendent of Railway Police, Bombay.

Statistics.

The number of cases dealt with by the police and the main results are shown in the table on the next page.

Jails.

The Jail department is under the Police Commissioner. The State contains a Central jail at Baroda, 4 district jails, a subordinate jail, and 39 lock-ups. The Central jail and

three of the district jails are in charge of Civil Surgeons, while the others are supervised by *vahivātdārs* or subordinate officials. The average daily number of inmates was 1,511 in 1881, 2,324 in 1901 (a famine year), and 915 in 1904-5. The mortality usually ranges from 25 to 35 per thousand, but in 1901 rose to 84, owing to the effects of famine on the population. The chief industry pursued in the Baroda Central jail is weaving. All the clothing required for the prisoners themselves, and for the police, is prepared here. Excellent carpets are also made, as well as cane baskets, boxes, chairs, &c. The produce is sold under a contract, and is exported in large quantities. In 1904-5 the total receipts from convict labour amounted to Rs. 25,000. The annual average cost of maintaining a prisoner was Rs. 69 in 1881, Rs. 76 in 1891, Rs. 81 in 1901, and Rs. 73 in 1904-5, the total expenditure in the last year being Rs. 67,000.

Jail industries.

Expenditure.

	Average, 1891-1900.	1904-5.
Number of cases reported	5,807	4,263
,, ,, decided in criminal courts	3,387	2,276
,, ,, ending in acquittal or discharge	1,311	631
,, convictions	2,076	1,532

Education.

Up to 1871 the State took no interest in schools and expended no money on education. The progress made since, which has raised education to a very high standard, is thus remarkable. Statistics will be found in a table at the end of this article (p. 60).

Indigenous schools.

Indigenous schools are usually conducted by Brāhmans, the post of head master being hereditary. The fees are small, varying in the case of monthly payments from 1 anna to 4 annas. In other cases a small lump sum is given, or payment is made in grain. The ages of the boys attending these schools vary from five to ten in towns, and from seven to about thirteen in villages. The subjects taught do not go beyond reading, writing, and elementary arithmetic, though formulae of a moral and intellectual nature are learnt by heart. No books are used, and the schoolhouse is either the master's own property or he is allowed to use a *dharmsāla*. Many of these institutions have been replaced by State schools.

Growth of the department.

In 1871 five State schools were opened, two for Gujarātī, two for Marāthī, and one for English tuition. In 1875 a department of Public Instruction was established, and rapid

extensions and developments then followed until the present system was established. The department, which is controlled by the Vidyādhikāri or Minister of Education, is divided into two branches, the Anglo-vernacular and the vernacular branch. The staff of the Baroda College and high school inspect the former, while the latter is supervised by an Inspector in each *prānt*, aided by eleven deputy-inspectors and a twelfth for Urdū and low-caste schools.

University education.

The Baroda College was founded in 1881, and recognized by the University of Bombay in the same year. It is fully equipped with chemical and physical laboratories, a botanical garden, an excellent library, and prepares students for the highest degrees in the faculty of Arts, the B.Sc., and also for the first LL.B. examination of the University. Close to the college building are large boarding-houses for the residence of students. In 1905–6 students from this college passed the following examinations: Previous 35, Intermediate 30, B.A. 19, B.Sc. 3, M.A. 1, and first LL.B. 13. A number of students have been sent at the State expense to continue their studies in England, America, and Japan.

Secondary education.

Secondary schools are divided into high schools and Anglo-vernacular schools. Their number has risen from 10 with 809 pupils in 1881 to 17 with 1,978 pupils in 1891, 21 with 2,926 pupils in 1901, and 21 with 3,095 pupils in 1904–5. In the latest year the State maintained 3 high schools and 14 Anglo-vernacular schools, and aided the other institutions. The total expenditure was 1·5 lakhs and the receipts from fees were Rs. 32,000. The proportion of the male population of school-going age under secondary instruction in 1904–5 was 1·83 per cent.

Primary education.

In the vernacular schools education is imparted in Gujarāti, Marāthī, or Urdū, and in the best of the Marāthī and Gujarātī schools there are seven standards, with Sanskrit as an optional subject. These schools are provided in all towns and villages with a population exceeding 1,000, though even smaller places possess them. Great attention is paid in primary schools to subjects of practical use, such as letter-writing, book-keeping, history and geography of the State, hygiene, village accounts, &c. Moral instruction is also given, and physical education is imparted. In some schools manual training has also been introduced. Village schools were first opened in 1891, and the village schoolmaster is now recognized as one of the permanent members of the *panchāyat*. The schools are opened in all villages where there are no regular schools, provided that at

least sixteen pupils can be collected. The standard is lower than in regular schools, but in the upper classes boys learn village accounts, book-keeping, and a little surveying. In 1905 these schools were made over to local boards.

An experiment in compulsory education has been carried on in the Amreli *tāluka* since 1893. In 1904–5, 66 schools were specially provided in 50 villages, and these were attended by 5,879 pupils, or 11 per cent. of the total population. An Act was passed in 1904 to provide for the extension of this system to other *tālukas*. The age limit for compulsory attendance is 7 to 12 for boys and 7 to 10 for girls, but numerous exemptions are allowed.

The total number of vernacular schools rose from 180 with 17,465 pupils in 1881 to 503 with 50,979 pupils in 1891, 1,189 with 83,277 pupils in 1901, and 1,243 with 81,649 pupils in 1904–5. The latest figures include 496 State schools for boys, 94 for girls, and 653 village schools and other institutions. Nearly 40 per cent. of the villages in the State have schools, and about 43 per cent. of boys of a school-going age are under instruction. The pay of an assistant master ranges from Rs. 7 to Rs. 25, while a head master receives from Rs. 15 to Rs. 60.

Female education. In 1881 the number of girls' schools in the State was 8, with an average attendance of 554. In 1891 the number of schools was 39, and the average number on the rolls was 4,103. In 1901 the number of schools was 97, and, including girls educated in mixed schools, female pupils numbered 14,427. There were 94 girls' schools in 1904–5 with 8,086 pupils, while 5,027 girls were being educated in mixed schools, giving a total of 9 per cent. of the female population of a school-going age. In the small girls' schools, in addition to the ordinary literary subjects, needlework and singing are taught, and in the more advanced schools, embroidery, drawing, singing, and cooking. Zanāna classes have been in existence for some time. They are attended by grown-up women, who are taught reading, writing, arithmetic, and needlework, in convenient hours when they are free from domestic duties. In 1904–5 there were 140 students in these classes.

Training schools. A training class for female teachers was opened in 1881, and has been developed into a female training college under the charge of a Lady Superintendent. The number of students on the rolls in 1904–5 was 26, of whom 7 completed their course and were employed by the department. A similar school for male teachers was opened in 1885 and abolished in

1898. It was reopened in 1905, in connexion with the technical school described below, and has 66 pupils.

Technical instruction.

In 1890 a technical school, called the Kala Bhavan, was established in the city of Baroda, and has since been improved and extended. It now includes classes for art, architecture, mechanical and chemical technology, weaving, and watch-making. The number of pupils rose from 175 in 1901 to 364 in 1904–5, and only a small proportion of the candidates for admission to the engineering class can be accommodated. Industrial schools at Padra, Vadnagar, and Kāthor are in charge of the Principal of the Kala Bhavan. The total expenditure on these institutions in 1904–5 was Rs. 53,000.

Music schools.

Since 1886 schools where music is taught on scientific principles have been maintained in Baroda and other places. These are exceedingly popular, and contained 638 pupils in 1904–5. Music is also taught to girls in the training college and in the higher classes of the vernacular girls' schools.

Muhammadan education.

In 1881 there were only 13 Muhammadan students in secondary schools, while primary schools contained 1,456. In 1891 there was one Muhammadan in the Baroda College, besides 32 in secondary and 5,123 in primary schools. In 1901 the number of Muhammadan pupils in the college was 3, in the secondary schools 69, and in the primary schools 7,639. A further rise took place in 1904–5, when 9,418 boys and 447 girls were attending schools. Muhammadan education has thus made rapid strides, though the number of those who desire higher instruction is small. Special Urdū schools, numbering 39, have greatly helped the community. The Mahārājā has recently founded handsome scholarships to assist Muhammadans in pursuing a university career.

Depressed classes.

Special schools are maintained for the jungle tribes and for the castes regarded as unclean. The former are taught reading and writing, and are also trained in carpentry and agriculture at Songarh. Less success has been obtained with the unclean castes, but in 1904–5 the number of pupils was 1,715, or 10 per cent. of the children of a school-going age, including 68 girls. Education in these schools is entirely free.

Finance.

The total State expenditure on education amounted to 4·9 lakhs in 1891, to 8·2 lakhs in 1901, and to 6·7 lakhs in 1904–5, or about 5½ annas per head of the population. A number of scholarships are also granted from the Mahārājā's privy purse at institutions in Bombay and Poona.

Literacy.

The Census of 1901 showed that out of every 1,000 of the population 87·7 could read and write, the proportion rising to

163·7 in the case of males, and being 7·6 for females. Among Pārsīs 60 per cent. were literate, and among Jains 36 per cent., while Musalmāns (9·4 per cent.) were rather more advanced than Hindus (8·5 per cent.). The Animists are the most backward community, with only 3.6 per cent.

Since 1881 several newspapers have been started, and at present there are five in existence. These papers contain information on local subjects and are useful to the people. The State has given much encouragement to the publication of useful vernacular works, including many translations from English and Sanskrit books, and also treatises on history, music, games, cookery, &c. The Press.

Before 1855 the practice of medicine was entirely in the hands of *vaids* and *hakīms*. They numbered about 50, and their most important duty was to attend on the Mahārājā, his relations, and his immediate followers, though they also practised among the townspeople. Native systems of medicine were followed, and the practitioners had no acquaintance with European science. In 1855 a hospital was opened in Baroda city, under the superintendence of the Residency Surgeon, but it was not until 1876 that a Medical department was established. A European medical officer was called in to commence the work, and rapid progress was made. Many of the *vaids* and *hakīms* were pensioned, and their places were filled by properly qualified practitioners. The Sayāji Rao Military Hospital and the Jamnābai Civil Hospital were opened in the city in 1877. Civil hospitals were founded at the head-quarters of each *prānt*, and dispensaries at most of the *tāluka* head-quarters. A central medical store dépôt was also established, and a chemical analyst appointed. Afterwards a veterinary hospital was added. In 1886 the magnificent building now known as the Countess of Dufferin Hospital was erected to take the place of the old State hospital, which had become unsuitable. Medical.

Statistics of the progress made in providing for the medical needs of the people are shown in the table on the following page.

A lunatic asylum was opened at Baroda city in 1898, with accommodation for 28 patients—16 males and 12 females. The number of lunatics treated in 1904–5 was 27, and the expenditure amounted to Rs. 2,785. Most of the cases of insanity are ascribed to the excessive use of liquor and to the smoking of *gānja*.

A vaccination department has been in existence for many years, and vaccination has been freely carried on among all Vaccination.

classes of the people. In the city of Baroda both animal lymph and lymph taken from vaccinated children are used, but in other parts of the State human lymph is generally used, which is revived by bovine lymph from time to time. In 1904–5 the staff consisted of 4 inspectors and 35 vaccinators, besides probationers and servants, and 60,872 persons were successfully vaccinated, or 31 per thousand of the population, the total cost being Rs. 13,800.

	1881.	1891.	1901.	1904-5.
Number of hospitals and dispensaries	34	43	51	40
Daily average attendance of in-patients	212	207	492	248
Daily average attendance of out-patients	1,994	3,192	3,736	3,946
Number of operations	6,947	10,940	9,232	9,466
Expenditure on establishment Rs.	78,544	1,42,911	1,39,720	1,10,611
" medicines, &c. Rs.	96,358	62,833	79,016	50,786

Village sanitation.

The Sanitary Commissioner supervises sanitary arrangements in villages, and his instructions and regulations are enforced by the local revenue officers and the police *pātels*. These officers have the power of fining persons who by storing manure or in any other way cause nuisances dangerous to health. In 1905 duties connected with village sanitation were entrusted to the local boards.

Survey.

The system of measurement followed in the State is an improved combination of chain and cross-staff survey. Villages mapped by the chain survey are now being surveyed. All *talātis* and *tajvīzdārs* (subordinate revenue officials) have to pass an examination in revenue survey, so that they may be able to check boundary marks according to the village maps, to help the *tāluka* officers in cases where survey units are divided, and inquire into field boundary disputes, encroachments, &c. There are also trained inspectors appointed to the different *tālukas* to examine the boundary marks, and to see that the survey is maintained in all its details.

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Distribution of Population, Baroda State, 1901

Prānt.	Area in square miles.	Number of towns.	Number of villages.	Total population.			Urban population.			Persons per square mile in rural areas.
				Persons.	Males.	Females.	Persons.	Males.	Females.	
Kadi .	3,015	18	1,063	834,744	426,723	408,021	173,758	86,417	87,341	277
Baroda .	1,887	17	904	644,071	341,693	302,378	205,240	110,040	95,200	288
Navsāri .	1,952	6	772	300,441	150,789	149,652	45,128	22,455	22,673	154
Amreli .	1,245	6	296	173,436	89,429	84,007	44,724	23,345	21,379	139
Total	8,099	47	3,035	1,952,692	1,008,634	944,058	468,850	242,257	226,593	241

General Statistics of Agriculture and Irrigation (Baroda State) for the Year ending July 30

(In square miles)

	1881–90 (average).	1891-1900 (average).	1901.	1904–5.
Total area	8,570	8,226	8,099	8,099
Cultivable, but not cultivated .	1,411	1,505	1,258	1,763
Uncultivable	2,524	2,474	2,400	2,585
Total cultivated area . .	4,635	4,247	4,441	3,751
Irrigated from canals . .	...	1	3	... *
" " wells and tanks .	178	243	219	... *
Total irrigated area . . .	178	244	222	... *
Unirrigated area . . .	4,457	4,003	4,219	... *
Cropped Area.				
Rice	82	80	101	190
Bājra	1,108	958	909	764
Jowār	846	727	1,075	770
Wheat	170	200	208	150
Other food-grains and pulses .	946	924	802	545
Castor-oil seed	30	39	55	... †
Rapeseed	103	93	81	27
Sugar-cane	13	7	6	4
Cotton	960	853	738	927
San-hemp	2	4	4	12
Poppy	13	10	11	14
Tobacco	37	34	40	21
Miscellaneous	475	397	448	444
Area double cropped . .	44	48	37	117

* Not available. † Included under miscellaneous.

Statistics of Education, Baroda State

	1891.				1901.				1904-5.			
	Number of institutions.	Scholars.			Number of institutions.	Scholars.			Number of institutions.	Scholars.		
		Males.	Females.	Total.		Males.	Females.	Total.		Males.	Females.	Total.
Public.												
Arts college	1	113	...	113	1	216	...	216	1	225	...	225
High schools	2	697	...	697	3	886	...	886	3	1,126	...	1,126
Anglo-vernacular schools	11	908	...	908	14	1,401	...	1,401	14	1,486	...	1,486
Primary schools	374	38,988	4,467	43,455	1,119	62,509	14,427	76,936	1,163	63,013	12,235	75,248
Training schools	2	74	19	93	1	...	25	25	2	66	26	92
Special schools	4	497	...	497	9	817	...	817	8	974	...	974
Private (with grant-in-aid).												
Advanced	4	373	...	373	4	639	...	639	4	483	...	483
Elementary	121	7,303	...	7,303	61	5,524	...	5,524	66	4,985	185	5,170
Orphanages	...	...	...	...	...	...	...	...	5	94	71	165
Total	519	48,953	4,486	53,439	1,212	71,992	14,452	86,444	1,266	72,452	12,517	84,969

RIVERS, ETC.

Saraswatī.—A small but holy river of Western India, rising at the south-west end of the Arāvalli range near the shrine of Ambā Bhawānī, and flowing south-westwards for about 110 miles, through the lands of Pālanpur, Rādhanpur, Mahī Kāntha, and Baroda, and past the ancient cities of Pātan, Anhilvāda, and Sidhpur, into the lesser Rann of Cutch, near Anvarpur. West of Pātan its course is underground for some miles, and its stream is small, except in the rains. The river is visited by Hindus, especially those who have lost their mothers. SIDHPUR is considered an especially appropriate place at which to perform rites in honour of a deceased mother.

Sābarmatī (Sanskrit, *Svabhravati*).—A large river of Western India, flowing from the hills of Mewār south-westwards into the Gulf of Cambay, with a course of about 200 miles and a drainage area of about 9,500 square miles. The name is given to the combined streams of the Sābar, which runs through the Idar State, and of the Hāthmati, which passes the town of Ahmadnagar (Mahī Kāntha Agency). In the upper part of their course both rivers have high rocky banks, but below their confluence the bed of the Sābarmatī becomes broad and sandy. The united river thence flows past Sādra and Ahmadābād, and receives on the left bank, at Vantha, about 30 miles below the latter city, the waters of the Vātrak, which, during its course of 150 miles, is fed by a number of smaller streams that bring down the drainage of the Mahī Kāntha hills. The Sābarmatī receives no notable tributaries on the right bank. There are several holy places on its banks in and about Ahmadābād city, and the confluence at Vantha attracts many pilgrims to an annual fair in the month of Kārtik (November). Luxuriant crops are grown on the silt deposited by the river, and many wells are sunk in its bed in the fair season. The lands of Parāntīj are watered from the Hāthmati by means of an embankment above Ahmadnagar.

Mahī (the *Mophis* of Ptolemy and *Mais* of the Periplus).—A river of Western India, with a course of from 300 to 350 miles and a drainage area estimated at from 15,000 to 17,000

square miles. It rises in the Amjherā district of the Gwalior State, 1,850 feet above sea-level (22° 52′ N. and 75° 5′ E.), and flows for about 100 miles through the south-western corner of the Central India Agency, at first north, next west, and lastly north-west, passing through the States of Gwalior, Dhār, Jhābua, Ratlām, and Sailāna. It then enters Rājputāna and flows in a northerly direction with a somewhat tortuous course, intersecting the eastern half of Bānswāra State, till it reaches the Udaipur frontier, where it is soon turned by the Mewār hills to the south-west, and for the rest of its course in Rājputāna it forms the boundary between the States of Dūngarpur and Bānswāra. It now passes on into Gujarāt, and during the first part of its course there flows through the lands of the Mahī Kāntha and Rewā Kāntha States. It then enters British territory, and separates the Bombay District of Kaira on the right from the Pānch Mahāls and Baroda on the left. Farther to the west, and for the rest of its course, its right bank forms the southern boundary of the State of Cambay, and its left the northern boundary of Broach District. Near Bungra, 100 miles from its source, the Mahī is crossed by the old Baroda-Nīmach road, and here the bed is 400 yards wide, with a stream of 100 yards and a depth of one foot. The Kaira section of the river is about 100 miles in length, the last 45 miles being tidal water. The limit of the tidal flow is Verākhāndi, where the stream is 120 yards across and the average depth 18 inches. About 30 miles nearer the sea, close to the village of Dehvān, the river enters Broach District from the east, and forms an estuary. The distance across its mouth, from Cambay to Kāvi, is five miles. The Mahī is crossed by the Bombay, Baroda, and Central India Railway at Wasad, and by the Godhra-Ratlām Railway at Pāli. During flood time, at spring tides, a bore is formed at the estuary and a wall-like line of foam-topped water rushes up for twenty miles, to break on the Dehvān sands.

The bed of the Mahī lies so much below the level of the land on either side of its banks that its waters cannot readily be made use of for irrigation. In fair weather the river is fordable at many places in the Bombay Presidency—at Dehvān, Gajna, Khānpur, and Umeta, for instance—and always in its upper course through Rājputāna, except in the rainy season, when its waters rise to a great height.

According to legend, the Mahī is the daughter of the earth and of the sweat that ran from the body of Indradyumna, the king of Ujjain. Another legend explains the name thus. A

young Gūjar woman was churning curds one day. An importunate lover, of whom she had tried to rid herself, but who would not be denied, found her thus engaged, and his attentions becoming unbearable, the girl threw herself into the pot. She was at once turned into water, and a clear stream flowed from the jar and, wandering down the hill-side, formed the Mahī or 'curd' river. A more probable derivation, however, is from the name of the lake whence it springs. This is often called the Mau or Mahu, as well as the Mendā. It is regarded by the Bhīls and the Kolīs as their mother, and the latter make pilgrimages to four places on its waters—Mingrad, Fāzilpur, Angarh, and Yaspur.[1] The height of its banks and the fierceness of its floods; the deep ravines through which the traveller has to pass on his way to the river; and perhaps, above all, the bad name of the tribes who dwell about it, explain the proverb: 'When the Mahī is crossed, there is comfort.'

It is interesting to note that this river has given rise to the terms *mehwās*, a 'hill stronghold,' and *mehwāsī*, a 'turbulent or thieving person.' The word was Mahīvāsī, 'a dweller on the Mahī,' and in Mughal times was imported into Delhi by the army, and is used by Muhammadan writers as a general term to denote hill chiefs, and those living in mountain fastnesses. A celebrated temple dedicated to Mahādeo at Baneshar (Rājputāna) stands at the spot where the Som joins the Mahī, and an important and largely attended fair is held here yearly.

Narbadā (*Narmada*; the *Namados* of Ptolemy; *Namnadios* of the Periplus).—One of the most important rivers of India. It rises on the summit of the plateau of AMARKANTAK (22° 41′ N. and 81° 48′ E.), at the north-eastern apex of the Sātpurā range, in Rewah (Central India), and enters the sea below Broach in the Bombay Presidency after a total course of 801 miles.

Course of the river.

The river issues from a small tank 3,000 feet above the sea, surrounded by a group of temples and guarded by an isolated colony of priests, and falls over a basaltic cliff in a descent of 80 feet. After a course of about 40 miles through the State of Rewah, it enters the Central Provinces and winds circuitously through the rugged hills of Mandlā, pursuing a westerly course until it flows under the walls of the ruined palace of Rāmnagar. From Ramnagar to Mandlā town it forms, for some 15 miles, a deep reach of blue water, unbroken by rocks and clothed on either bank by forest. The river then turns north in a narrow loop towards Jubbulpore, close to which town, after a fall of some

30 feet, called the *Dhuāndhāra* or 'fall of mist,' it flows for 2 miles in a narrow channel which it has carved out for itself through rocks of marble and basalt, its width here being only about 20 yards. Emerging from this channel, which is well known as the 'Marble Rocks,' and flowing west, it enters the fertile basin of alluvial land forming the Narbadā valley, which lies between the Vindhyan and Sātpurā Hills, and extends for 200 miles from Jubbulpore to Handiā, with a width of about 20 miles to the south of the river. The Vindhyan Hills rise almost sheer from the northern bank along most of the valley, the bed of the river at this part of its course being the boundary between the Central Provinces and Central India (principally the Bhopāl and Indore States). Here the Narbadā passes Hoshangābād and the old Muhammadan towns of Handiā and Nimāwar. The banks in this part of its valley are about 40 feet high, and the fall in its course between Jubbulpore and Hoshangābād is 340 feet. Below Handiā the hills again approach the river on both sides and are clothed with dense forests, once the favourite haunts of Pindāris and less famous robbers. At Mandhār, 25 miles below Handiā, there is a fall of 40 feet, and another of the same height occurs at Punāsa. The bed of the river in its whole length within the Central Provinces is one sheet of basalt, seldom exceeding 150 yards in absolute width, and at intervals of every few miles upheaved into ridges, which cross it diagonally and behind which deep pools are formed. Emerging from the hills beyond Māndhāta on the borders of the Central Provinces, the Narbadā now enters a second open alluvial basin, flowing through Central India (principally Indore State) for nearly 100 miles. The hills are here well away from the river, the Sātpurās being 40 miles to the south and the Vindhyas about 16 miles to the north. In this part of its course the river passes the town of Maheshwar, the old capital of the Holkar family, where its northern bank is studded with temples, palaces, and bathing *ghāts*, many of them built by the famous Ahalyā Bai, whose mausoleum is here. The last 170 miles of the river's course are in the Bombay Presidency, where it first separates the States of Baroda and Rajpīpla and then meanders through the fertile District of Broach. Below Broach city it gradually widens into an estuary, whose shores are 17 miles apart as it joins the Gulf of Cambay.

Drainage area, tributaries, &c.

The drainage area of the Narbadā, estimated at about 36,000 square miles, is principally to the south and comprises the northern portion of the Sātpurā plateau and the valley dis-

tricts. The principal tributaries are the Banjār in Mandlā, the Sher and Shakkar in Narsinghpur, and the Tawā, Ganjāl, and Chhotā Tawā in Hoshangābād District. The only important tributary from the north is the Hiran, which flows in beneath the Vindhyan Hills, in Jubbulpore District. Most of these rivers have a short and precipitous course from the hills, and fill with extraordinary rapidity in the rains, producing similarly sudden floods in the Narbadā itself. Owing to this and to its rocky course, the Narbadā is useless for navigation except by country boats between August and February, save in the last part of its course, where it is navigable by vessels of 70 tons burden up to the city of Broach, 30 miles from its mouth. It is crossed by railway bridges below Jubbulpore, at Hoshangābād, and at Mortakka. The influence of the tides reaches to a point 55 miles from the sea. The height of the banks throughout the greater part of its course makes the river useless for irrigation.

Sacred character of the river.

The Narbadā, which is referred to as the Rewā (probably from the Sanskrit root *rev*, 'to hop,' owing to the leaping of the stream down its rocky bed) in the Mahābhārata and Rāmāyana, is said to have sprung from the body of Siva, and is one of the most sacred rivers of India, local devotees placing it above the Ganges, on the ground that, whereas it is necessary to bathe in the Ganges for forgiveness of sins, this object is attained by mere contemplation of the Narbadā. 'As wood is cut by a saw (says a Hindu proverb), so at the sight of the holy Narbadā do a man's sins fall away.' Gangā herself, so local legend avers, must dip in the Narbadā once a year. She comes in the form of a coal-black cow, but returns home quite white, free from all sin. The Ganges, moreover, was (according to the *Rewā Purāna*) to have lost its purifying virtues in the year 1895, though this fact has not yet impaired its reputation for sanctity. At numerous places on the course of the Narbadā, and especially at spots where it is joined by another river, are groups of temples, tended by Narmdeo Brāhmans, the special priests of the river, where annual gatherings of pilgrims take place. The most celebrated of these are Bherāghāt, Barmhān, and Onkār Māndhāta in the Central Provinces, and Barwānī in Central India, where the Narbadā is joined by the Kapilā. All of these are connected by legend with saints and heroes of Hindu mythology; and the description of the whole course of the Narbadā, and of all these places and their history, is contained in a sacred poem of 14,000 verses (the *Narmadā Khanda*), which, however, has

been adjudged to be of somewhat recent orgin. Every year 300 or more pilgrims start to perform the *pradakshina* of the Narbadā: that is, to walk from its mouth at Broach to its source at Amarkantak on one side, and back on the other, a performance of the highest religious efficacy. The most sacred spots on the lower course of the river are Suklatīrtha, where stands an old banyan-tree that bears the name of the saint Kabīr, and the site of Rājā Balī's horse-sacrifice near Broach.

Historical associations.

The Narbadā is commonly considered to form the boundary between Hindustān and the Deccan, the reckoning of the Hindu year differing on either side of it. The Marāthās spoke of it as 'the river,' and considered that when they had crossed it they were in a foreign country. In the Mutiny the Narbadā practically marked the southern limit of the insurrection. North of it the British temporarily lost control of the country, while to the south, in spite of isolated disturbances, their authority was maintained. Hence when, in 1858, Tāntia Topī executed his daring raid across the river, the utmost apprehension was excited, as it was feared that, on the appearance of the representative of the Peshwā, the recently annexed Nāgpur territories would rise in revolt. These fears, however, proved to be unfounded, and the country remained tranquil.

Tāpti.—One of the great rivers of Western India. The name is derived from *tāp*, 'heat,' and the Tāpti is said by the Brāhmans to have been created by the sun to protect himself from his own warmth. The Tāpti is believed to rise in the sacred tank of Multai (*multāpi*, 'the source of the Tāpti') on the Sātpurā plateau, but its real source is 2 miles distant (21° 48′ N. and 78° 15′ E.). It flows in a westerly direction through the Betūl District of the Central Provinces, at first traversing an open and partially cultivated plain, and then plunging into a rocky gorge of the Sātpurā Hills between the Kālībhīt range in Nimār (Central Provinces) and Chikalda in Berār. Its bed here is rocky, overhung by steep banks, and bordered by forests. At a distance of 120 miles from its source it enters the Nimār District of the Central Provinces, and for 30 miles more is still confined in a comparatively narrow valley. A few miles above Burhānpur the valley opens out, the Sātpurā Hills receding north and south, and opposite that town the river valley has become a fine rich basin of alluvial soil about 20 miles wide. In the centre of this tract the Tāpti flows between the towns of Burhānpur and Zaināhād, and then passes into

the Khāndesh District of Bombay. In its upper valley are several basins of exceedingly rich soil, but they have long been covered by forest, and it is only lately that the process of clearing them for cultivation has been undertaken.

Shortly after entering Khāndesh the Tāpti receives on the left bank the Pūrna from the hills of Berār, and then flows for about 150 miles through a broad and fertile valley, bounded on the north by the Sātpurās and on the south by the Sātmālas. Farther on the hills close in, and the river descends through wild and wooded country for about 80 miles, after which it sweeps southwards to the sea through the alluvial plain of Surat, and becomes a tidal river for the last 30 miles of its course. The banks (30 to 60 feet) are too high for irrigation, while the bed is crossed at several places by ridges of rock, so that the river is navigable for only about 20 miles from the sea. The Tāpti runs so near the foot of the Sātpurās that its tributaries on the right bank are small; but on the left bank, after its junction with the Pūrna, it receives through the Girnā (150 miles long) the drainage of the hills of Bāglān, and through the Bori, the Pānjhra, and the Borai, that of the northern buttress of the Western Ghāts. The waters of the Girnā and the Pānjhra are dammed up in several places and used for irrigation. On the lower course of the Tāpti floods are not uncommon, and have at times done much damage to the city of Surat. The river is crossed at Bhusāwal by the Jubbulpore branch of the Great Indian Peninsula Railway, at Savalda by the Bombay-Agra road, and at Surat by the Bombay, Baroda, and Central India Railway. The Tāpti has a local reputation for sanctity, the chief *tīrthas* or holy places being Chāngdeo, at the confluence with the Pūrna, and Bodhān above Surat. The fort of Thālner and the city of Surat are the places of most historic note on its course, the total length of which is 436 miles. The port of Suvāli (Swally), famous in early European commerce with India, and the scene of a celebrated sea-fight between the British and the Portuguese, lay at the mouth of the river, but is now deserted, its approaches having silted up.

Anhilvāda.—The kingdom of Anhilvāda in Gujarāt, within the present limits of the Bombay Presidency, was founded about A.D. 746–65 by a Chāvada Rājput, Vanarājā, son of the king of Panchāsar, a small Chāvada chiefship of the Gūjar empire. Vanarājā, after an adventurous childhood, rose to fame by deeds of arms, and founded a dynasty which endured for two centuries. The site of Anhilvāda is said by tradition to

have been indicated by a hunted hare that turned on its pursuers, a myth that is told of the founding of several other places. It is also related that the city was named after a Bharwād shepherd, Anhila, who assisted Vanarājā in finding a site for it. The early history of the kingdom is somewhat obscure; but it seems certain that Vanarājā ruled till 780, and was succeeded by eight rulers of his line, the last of whom died in 961. In that year the Chāvada dynasty was replaced by the Solankis or Chālukyas, of whom the first, Mūlarājā (941–96), is the most famous. He extended his dominions into Kāthiāwār, Cutch, and South Gujarāt. The direct descendants of Mūlarājā ruled at Anhilvāda for two centuries. They were Saivas in religion, and were specially attached to the temple of Somnāth at SOMNĀTH PĀTAN. Mahmūd of Ghazni captured and sacked the temple in 1026, during the reign of Bhīma I. On the withdrawal of Mahmūd, Bhīma rebuilt the temple, and the kingdom continued in the hands of his direct successors until 1143. From that date a collateral branch of Mūlarājā's descendants ruled in Anhilvāda for a hundred years, claiming sovereignty over Kāthiāwār and Mālwā, and at one time (1160) invading the Konkan. On the extinction of the line of Mūlarājā in 1242 the Vāghelas of Dholka ruled in these territories, till ousted by the invasion of Alā-ud-dīn Khiljī in 1298.

Extent.

Gujarāt.—This name, taken in its widest sense, signifies the whole country in which Gujarātī is spoken, and includes Cutch and Kāthiāwār, as well as the northern Districts and States of the Bombay Presidency from Pālanpur to Damān: that is, the country lying between 20° 9′ and 24° 43′ N. and 68° 25′ and 74° 29′ E. In a narrower and more correct sense, the name applies to the central plain north of the Narbadā and east of the Rann of Cutch and Kāthiāwār. Gujarāt, in this sense, lies between 23° 25′ and 24° 4′ N. and 71° 1′ and 74° 1′ E., and has an area of 29,071 square miles, and a population of 4,798,504. Of this area less than one-fourth (7,168 square miles), lying chiefly in the centre and south, is British territory, belonging to the four Districts of AHMADĀBĀD, KAIRA, PĀNCH MAHĀLS, and BROACH. About 4,902 square miles, chiefly in two blocks—one lying west of the Sābarmatī and the other between the Mahī and the Narbadā—belong to BARODA. The remainder belongs to the large and small States that have relations with the Bombay Government, and are distributed among the Agencies of PĀLANPUR in the north, MAHĪ KĀNTHA in the north-east, REWĀ KĀNTHA in the east, and CAMBAY at the mouth of the Sābarmatī.

The plain of Gujarāt is bounded on the north by the desert of Mārwār, and on the east by the hills of crystalline rock that run south-east from Abu to join the western outliers of the Vindhyas near Pāvāgarh. From these hills, in the neighbourhood of which the country is rough, rocky, and well wooded, it slopes in a south-westerly direction towards the Rann of Cutch, the Nal Lake, and the sea, unbroken by any rocky outcrop or rising ground. The central region is of recent alluvial formation and has one of the richest soils in India, though parts of it are liable to flooding in the rains, and it suffered much in the famine of 1899–1902. Towards the Rann, the Nal Lake, and the sea-coast, the plain passes into salt or sandy waste, where the subsoil water is brackish and lies deep below the surface. The grazing lands of Pālanpur in the north are watered by the Banās and the Saraswatī, which flow from the Arāvalli mountains into the Little Rann. The Sābarmatī, rising near the source of the Banās, flows into the Gulf of Cambay. Farther east, the Mahī, rising far away in Mālwā, flows into the same gulf, which finally receives also the waters of the Narbadā, the lower course of which passes between Central Baroda and Rājpīpla and through the British District of Broach. The central and coast tracts are stoneless, and have fine groves of field trees, while the eastern hills are covered with forest. The spread of cultivation has driven the tiger, leopard, and bear into the eastern hills, and greatly reduced the numbers of the wild hog; but deer, especially antelope and *nīlgai*, are still common. Game birds, both on land and water, are abundant.

The name Gujarāt is derived from the widespread Gūjar Name. tribe, which is not, however, at the present day of much account in the province. According to some writers the Gūjars were immigrants from Central Asia. There is no certain trace of them in India before the sixth century, by the end of which they were powerful in Rājputāna and had set up a kingdom at Broach, so they most likely entered India with the White Huns in the latter half of the fifth century. The Chinese traveller Hiuen Tsiang (A.D. 640) was acquainted with the kingdom of Broach, and also with a Gurjara kingdom farther north which he calls Kiu-chi-lo, having its capital at Pilo-mo-lo, which is plausibly identified with Bhilmāl in the Jodhpur State. In its earliest form (Gurjararātra), the name Gujarāt is applied in inscriptions of the ninth century to the country north of Ajmer and the Sāmbhar Lake, while from the tenth to the thirteenth century Gujarāt means the Solanki kingdom of Anhilvāda. In the Musalmān period the name

was applied to the province that was governed first from Anhilvāda and then from Ahmadābād.

History.

For the history of Gujarāt in the pre-Muhammadan period and its invasion by Mahmūd of Ghazni, see BOMBAY PRESIDENCY and ANHILVĀDA. By about 1233 the Solanki kingdom of Anhilvāda had broken up, and the most powerful rulers in Gujarāt were the Vāghela chiefs of DHOLKA.

'An inaccessible position, beyond the great desert and the hills connecting the Vindhyas with the Arāvalli range, long preserved Gujarāt from the Muhammadan yoke. Only by sea was it easily approached, and to the sea it owed its peculiar advantages, . . . its favouring climate and fertile soil. . . . The greater part of the Indian trade with Persia, Arabia, and the Red Sea passed through its harbours, besides a busy coasting trade. "The benefit of this trade overflowed upon the country, which became a garden, and enriched the treasury of the prince. The noble mosques, colleges, palaces, and tombs, the remains of which still adorn Ahmadābād and its other cities to this day, while they excite the admiration of the traveller, prove both the wealth and the taste of the founders[1]." Not till the reign of Alā-ud-dīn (of Delhi) at the close of the thirteenth century did it become a Muslim province, and a century later it became independent again under a dynasty of Muslim kings. . . . Fīroz Shāh in 1391 granted the fief of Gujarāt to Zafar Khān, the son of a converted Rājput, and five years later the fief-holder assumed the royal canopy. He soon enlarged his dominions, at first but a strip between hills and sea, by the annexation of Idar to the north and Diu in Kāthiāwār, plundered Jhālor, and even took possession of Mālwā for a short space in 1407, setting his brother on the throne in the place of Hoshang, the son of Dilāwar. His successor Ahmad I (1411–43) founded AHMADĀBĀD, which has ever since been the chief city of Gujarāt, and recovered Bombay and Salsette from the Deccan kings. Mahmūd I (1458–1511) not only carried on the traditional wars of his dynasty with Mālwā on the east and Khāndesh on the south, but kept a large fleet to subdue the pirates of the islands.

'Nor were Asiatic pirates the only disturbers of his coast. The first of the three great waves of European invasion was already beating on the shores of Gujarāt. Vasco da Gama had reached the Malabar ports in 1498, and the effects of the new influence were soon felt farther north. The Portuguese had no more intention, at first, of founding an eastern empire than the later Dutch and English companies. The hostility of the Muslim traders compelled them to protect their agents, and a commercial policy was necessarily supported by military power. . . . The collision was brought about by the spirited action of the last Mamlūk Sultān of Egypt, Kānsūh-el-Ghūrī,

[1] Erskine, *History of India*, vol. i. p. 21.

who, realizing the imminent jeopardy of the great Indian trade which supplied so much of the wealth of Egypt, resolved to drive the Portuguese from the Arabian Sea. The Mamlūks had long maintained a fleet in the Red Sea, and Admiral Husain was dispatched in 1508 to Gujarāt with a well-equipped war squadron manned with sailors who had often fought with Christian fleets in the Mediterranean. He was joined by the fleet of Gujarāt, commanded by the Governor of Diu, in spite of the efforts of the Portuguese captain, Lourenço de Almeida, to prevent their union; and the combined fleet was in every respect superior to the flotilla of Christian merchantmen which boldly sailed out of the port of Chaul to the attack. The Portuguese were defeated in a running fight which lasted two days, and the young captain, son of the famous viceroy, was killed. . . . He was avenged a few months later, when on February 2, 1509, his father, the viceroy Francisco de Almeida, utterly defeated the combined fleet of Egypt and Gujarāt off Diu. In the following year the king of Gujarāt offered Albuquerque, the conqueror of Goa, the port of Diu, and a Portuguese factory was there established in 1513, though the celebrated fortress of the Christian invaders was not built till 1535.

'Though unable to withstand the Portuguese—or perhaps not unwilling to see his powerful deputy at Diu humiliated—Bahādur (1526–37) was one of the most brilliant figures among the warrior kings of Gujarāt. The Rājputs of the hills and the kings of the Deccan owned his superiority, and in 1531 he annexed Mālwā. A Rājput rising and the advance of the Mughals under Humāyūn the son of Bābar for a time destroyed his authority (1535), but he recovered it bravely (1536), only to fall at last, drowned in a scuffle with the Portuguese whom he had admitted to his coast[1].'

In 1572 Akbar annexed Gujarāt to the Mughal empire, of which it became a *Sūbah*. At its best period the independent Muhammadan kingdom of Gujarāt comprised Northern Gujarāt from Abu to the Narbadā; Kāthiāwār, which became a Musalmān province through the occupation of Diu (1402) and Girnār (1471), and the sack of Dwārka Bet (1473); the Tāpti valley as far east as Thālner; and the tract between the Ghāts and the sea from Surat to Bombay.

The Mughal viceroys of Gujarāt were, up to the death of Aurangzeb (1707), on the whole successful in maintaining order and prosperity, in spite of the turbulence of the Kolīs and Rājputs in the north, of the famines of 1596, 1631, 1681, 1684, and 1697–8, and of the Deccani attacks on Surat, which was sacked once by Malik Ambar (1609) and twice by Sivajī (1664 and 1670). Throughout the Mughal period the province

[1] S. Lane-Poole, *Mediaeval India* ('Story of the Nations'), chap. vii.

generally yielded a revenue of nearly 2 crores, and a large foreign trade was carried on at the ports of Cambay, Broach, and Surat. The decline of Mughal rule began with a Marāthā raid across the Narbadā in 1705. From 1711 these invasions became annual, and the Marāthās established themselves successively at Songarh (1719), Chāmpāner (1723), and Baroda (1734). The beginning of the end came during the governorship of Sarbuland Khān (1723–30), who farmed out the revenues and admitted the Marāthā claims to *chauth* and *sardeshmukhi*. Henceforward, although the Delhi court continued to appoint viceroys until 1748, absolute anarchy reigned in the province, which was ravaged impartially by the hostile leaders of the Peshwā's and the Gaikwār's armies, by the Rājās of Jodhpur, by the agents of the Nizām-ul-mulk, and by local Moslem chiefs, such as the Bābis, who established themselves at Junāgarh (1738) and Bālāsinor (1761), the Jhāloris, who settled at Pālanpur (1715), and Momin Khān, who began to scheme for the independence of Cambay about 1736. Famines in 1719, 1732, and 1747 added to the misery of the people. In 1737 the Gaikwār was admitted to a full half-share in the revenues of the province and occupied Ahmadābād jointly with the viceroy's troops (1738). Broach from 1731 to 1752 was held by a deputy of the Nizām, but had to give up a share of its customs to the Gaikwār. Surat suffered chiefly from the violence of rival candidates for the governorship.

Gujarāt was now parcelled out among a number of local chiefs who carried on ceaseless petty wars, which the Marāthās had no wish to suppress so long as they could secure their share of the plunder of the province. The Peshwā's seizure of half the Gaikwār's share in 1751 only added another claimant of blackmail. After the battle of Pānīpat the Musalmāns tried but failed to drive out the Gaikwār (1761), and the last chance of a strong native government growing up was ruined by the disputed succession at Baroda in 1768. The local troubles at Surat lasted until the castle was taken by the British in 1759.

The Marāthā confederacy now began to break up, and the Gaikwar was detached by his acceptance of British protection (1782). In Gujarāt there was little improvement in the government during this period, though, in spite of disputes in the Gaikwār's family and intrigues at the Poona court, a semblance of order was preserved by British influence from 1782 to 1799, when the Gaikwār took Ahmadābād and imprisoned the Peshwā's agent. Further disturbances then took

place, which were put down by a British force (1803). In 1799 the Peshwā farmed his rights to the Gaikwār, who entered into subsidiary alliance with the British. Negotiations followed between the British, the Peshwā, and the Gaikwār, which ended in the cession to the first named of certain districts and rights in Gujarāt. The British Government had annexed Surat in 1800 on the death of the Nawāb, whose family were pensioned off, and had conquered Broach from Sindhia in the war of 1803.

After the overthrow of the Peshwā in 1818 territorial arrangements in Gujarāt settled down into their present form, the country being divided between the State of BARODA, the British Districts of AHMADĀBĀD, BROACH, KAIRA, PĀNCH MAHĀLS, SURAT, and a number of small Native States. Gujarāt suffered very severely from famine in 1899–1902, a period which was marked by great mortality both of men and cattle. The blow fell more severely from the fact that it came after a long period of prosperity, and that the people and the officials were alike unprepared for the calamities that followed.

[See MAHĪ KĀNTHA, PĀLANPUR, REWĀ KĀNTHA, and CAMBAY. See also Sir J. Campbell, *History of Gujarāt*, vol. i, part i (1896), *Bombay Gazetteer* series; and Rev. G. P. Taylor, 'The Coins of Ahmadābād,' *Journal*, *Royal Asiatic Society*, *Bombay Branch*, vol. xx.]

DISTRICTS, ETC.

Boundaries and physical aspects.

Kadi Prānt.—A *prānt* or district in Baroda State, situated in Northern Gujarāt, between 23° and 24° 9′ N. and 71° 50′ and 73° 15′ E., with an area of 3,015 square miles. It is the largest and most productive of the four *prānts* into which the Gaikwār's territory is divided, and is bounded on the north by the Pālanpur and Rādhanpur States; on the west by Rādhanpur State and Ahmadābād District; on the south by Ahmadābād and Kaira; and on the east by the Mahī Kāntha States. Most of the *prānt* lies west of the Sābarmatī, and consists of a dreary looking plain, with few trees except near village sites. Some scattered portions east of the river are well wooded, and contain a few small but picturesque hillocks. The chief rivers are the Sābarmatī, the Saraswatī, and the Banās.

Botany.

The greater part of the area is under cultivation, the fields being often surrounded by hedges composed of species like *Capparis grandis*, *C. sepiaria*, *Jatropha Curcas*, *Euphorbia antiquorum*, with various *Leguminosae*, *Menispermaceae*, *Asclepiadeae*, and *Convolvulaceae* among the climbers. On waste ground such species as *Calotropis gigantea*, *Jatropha gossypifolia*, *Fagonia arabica*, *Echinops echinatus*, *Tephrosia purpurea* are found. Field-weeds include *Celsia coromandeliana*, *Sphaeranthes indicus*, *Launaea nudicaulis*, *Coldenia procumbens*, *Blumea eriantha*. Damp ground and stream beds contain *Aeluropus villosus*, *Herpestis Monnieria*, *Mollugo hirta*, *Cyperus laevigatus*, *Scirpus subulatus*, *Hydrilla verticillata*, *Potamogeton pectinatus*. The planted or semi-spontaneous species near habitations include the mango, tamarind, teak, custard apple, pomegranate, *bael*, and various species of *Ficus* such as banyan and *pīpal*.

Climate.

Kadi is considered to be the healthiest part of the State, the *tālukas* of Dehgām, Vijāpur, Visnagar, and Pātan being favourably known for the comparative absence of malaria.

Population.

The population was estimated at 850,325 in 1872. At the three following enumerations it was: (1881) 988,487, (1891) 1,098,742, and (1901) 834,744. The *prānt* suffered severely in the famine of 1899–1900. It is divided into ten *tālukas* or

mahāls, and two *petas* or sub-*mahāls*, statistics of which in 1901 are given below:—

Tāluka.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Kadi	331	1	118	71,784	217	−25·8	4,342
Kālol	267	1	88	80,532	302	−17·1	5,038
Vijāpur	346	2	107	117,286	339	−24·9	5,301
Mehsāna	195	1	83	75,254	386	−10·2	4,314
Visnagar	172	2	54	70,989	471	−23·7	5,319
Vadāvli	332	2	113	67,302	203	−33·7	2,839
Pātan	409	2	140	104,136	255	−23·5	7,605
Sidhpur	254	2	78	90,161	355	−16·1	5,584
Kherālu	246	3	88	76,463	311	−22·5	4,408
Hārij	154	...	43	12,505	81	−57·1	346
Dehgām	239	1	95	49,461	207	−28·6	2,865
Atarsumba	70	1	56	18,871	270	−37·9	1,276
Total	3,015	18	1,063	834,744	277	−24·0	49,237

The chief towns are PĀTAN, VISNAGAR, SIDHPUR, VADNAGAR, KADI, UNJHĀ, MEHSĀNA (the head-quarters), VIJĀPUR, CHĀNASMA, KHERĀLU, LĀDOL, KĀLOL, VALĀM, and UMTA. About 98 per cent. of the population speak Gujarātī. In 1901 only 8 native Christians were enumerated in the *prānt*, but the American Methodist Episcopal Mission claims 250 adherents in eight villages, and provides five day schools.

Agriculture.

About 90 per cent. of the total area is composed of light sandy soil, which is very productive if manured and irrigated. Black soil is found in patches. Irrigation is chiefly supplied by wells, including large temporary wells which are used for a single season. The principal crops are *bājra*, *jowār*, wheat, *banti*, *dangar*, barley, *vari*, *kodra*, *chenna*, *kuri*, *bāvto*, *chasatio*, *kāng*, *math*, *mag*, *udid*, *guvār*, *tuver*, *chola*, *chana*, *val*, *kulthi*, *sarsav*, *erandi*, poppy, *tal*, *kasumbo*, tobacco, sugar-cane, cotton, *bhendi*, chillies, *sakaria*, and other garden products. Poppy is of great importance and covered 12,262 acres in 1904–5, yielding on an average 12 lb. of crude opium per acre.

Industries, trade, &c.

The spinning of cotton thread and silk and cotton-weaving are the chief industries. There may also be mentioned: embroidery on a small scale; the manufacture of ornaments in gold, silver, and ivory, and of betel-nut cutters, knives, brass and copper utensils, toys, and pottery. The number of ginning factories is six, one being connected with a weaving-mill. The chief centres of trade are Pātan, Kadi, Mehsāna, Visnagar, Vadnagar, and Sidhpur, the first being the most important. All

these towns are connected by railway lines, by which the *prānt* is exceptionally well served. In addition to the main line of the Rājputāna-Mālwā Railway, which passes from south to north, State lines diverge from Mehsāna to Kherālu, Pātan, and Viramgām, and from Kālol to Kadi and Vijāpur. The Ahmadābād-Parāntīj line also serves some places. Other lines are projected from Manund Road to Chānasma, from Visnagar to Vijāpur, and from Kherālu to Dabhoda.

Land revenue.

The land revenue rose from 32·2 lakhs in 1881 to 35·8 lakhs in 1891, and was 35·5 lakhs in 1901; and in 1904–5, while the demand was 22 lakhs, the collections amounted to only 11·2 lakhs. A settlement for fifteen years was made between 1891 and 1900, and parts of the *prānt* are now being resettled. The *prānt* contains 36 *mehwāsi* villages, which were formerly assessed on the cultivated area only, but a settlement has now been made on the ordinary lines at greatly reduced rates. The average assessment varies in different *tālukas* from Rs. 1–3–0 to Rs. 2–8–0 per *bīgha* ($\frac{4}{7}$ acre) for 'dry' land, and from Rs. 1–9–0 to Rs. 2–11–0 for 'wet' land.

Local self-government.

The *prānt* contains twelve municipalities, three of which are administered by boards reconstituted in 1905 on a partly elective basis. These latter—Pātan, Sidhpur, and Visnagar—have a total income of Rs. 21,500 from customs, excise, and tolls, besides grants of Rs. 7,000; and the remaining nine receive grants of Rs. 20,500. A District board and local boards were constituted in 1905.

Administration, &c.

The administration is carried on by the *Sūbah*, while the court of the *prānt* Judge is at Visnagar. Education is well provided for, as the *prānt* has one high school (at Pātan), 6 Anglo-vernacular schools, and 369 vernacular schools, the total number of pupils in 1904–5 being 25,316. Two civil hospitals and eleven dispensaries treated 86,329 patients in 1904–5, of whom 359 were in-patients.

Kadi Tāluka.—South-western *tāluka* of the Kadi *prānt*, Baroda State, with an area of 331 square miles. The population fell from 96,782 in 1891 to 71,784 in 1901. The *tāluka* contains one town, KADI (population, 13,070), the head-quarters of the *tāluk*, and of the *prānt* until 1904; and 118 villages. The general aspect of the *tāluka* is very unprepossessing, as it consists for the most part of an uninterrupted plain bare of all trees. Round the town of Kadi, however, and in its neighbourhood there are trees in fair abundance, a gentle undulating country, and numerous tanks. The soil for the most part is light and sandy. In 1904–5 the land revenue was Rs. 2,58,000.

Kālol Tāluka.—Southern *tāluka* of the Kadi *prānt*, Baroda State, with an area of 267 square miles. The population fell from 97,089 in 1891 to 80,532 in 1901. It contains one town, KĀLOL (population, 6,765), the head-quarters, and 88 villages. The *tāluka* presents the appearance of a fairly wooded and well-cultivated plain. The Sābarmatī just touches its western boundary. The surface soil is *gorāt*, or of a light sandy nature. In 1904–5 the land revenue was Rs. 2,15,000.

Vijāpur Tāluka.—Eastern *tāluka* of the Kadi *prānt*, Baroda State, with an area of 346 square miles. The population fell from 156,113 in 1891 to 117,286 in 1901. The *tāluka* contains two towns, VIJĀPUR (population, 8,510), the head-quarters, and LĀDOL (6,641); and 107 villages. It is an exceedingly well-wooded plain. The Khāri crosses the *tāluka* to the north, while the Sābarmatī flows past the southern boundary. The soil is light and sandy. In 1904–5 the land revenue was Rs. 1,85,000.

Mehsāna Tāluka.—*Tāluka* in the Kadi *prānt*, Baroda State, with an area of 195 square miles. The population fell from 83,651 in 1891 to 75,254 in 1901. The *tāluka* contains one town, MEHSĀNA (population, 9,393), the head-quarters, and 83 villages. Its aspect is sometimes that of an even plain, sometimes that of a gently undulating country. The Rupen and the Khāri flow through the northern portion. The surface soil is generally light and sandy. In 1904–5 the land revenue was Rs. 2,51,000.

Visnagar Tāluka.—Eastern *tāluka* of the Kadi *prānt*, Baroda State, with an area of 172 square miles. The population fell from 92,485 in 1891 to 70,989 in 1901. The *tāluka* contains two towns, VISNAGAR (population, 17,268), the head-quarters, and VĀLAM (5,337); and 54 villages. The bare treeless portion of the *tāluka* is most uninteresting, but towards the south and west trees become more frequent. The soil is light and sandy. In 1904–5 the land revenue was Rs. 2,06,000.

Vadāvli Tāluka.—Western *tāluka* of the Kadi *prānt*, Baroda State, with an area of 332 square miles. The population fell from 101,450 in 1891 to 67,302 in 1901. The *tāluka* contains two towns, CHĀNASMA (population, 8,183), the head-quarters, and DHINOJ (4,127); and 113 villages. Its aspect is uninviting, as it is a monotonous plain unrelieved by the presence of trees. The surface soil is mostly sandy, though in a few places black soil is found over a limited area. In 1904–5 the land revenue was Rs. 2,68,000.

Pātan Tāluka.—North-western *tāluka* of the Kadi *prānt*,

Baroda State, with an area of 409 square miles. The population fell from 136,083 in 1891 to 104,136 in 1901. The *tāluka* contains two towns, PĀTAN (population, 31,402), the head-quarters, and BALISNA (4,650); and 140 villages. It presents the appearance of a fairly wooded plain, with the river Saraswatī running through the centre. To the west and north the soil is black, while to the east it is light and sandy. In 1904–5 the land revenue was Rs. 3,26,000.

Sidhpur Tāluka.—Northern *tāluka* of the Kadi *prānt*, Baroda State, with an area of 254 square miles. The population fell from 107,470 in 1891 to 90,161 in 1901. The *tāluka* contains two towns, SIDHPUR (population, 14,743), the head-quarters, and UNJHĀ (9,800); and 78 villages. It is flat and undulating by turns, and is somewhat bare of trees, while the surface soil is light and sandy. The river Saraswatī flows through the centre. In 1904–5 the land revenue was Rs. 2,89,000.

Kherālu Tāluka.—North-eastern *tāluka* of the Kadi *prānt*, Baroda State, with an area of 246 square miles. The population fell from 98,682 in 1891 to 76,463 in 1901. The *tāluka* contains three towns, KHERĀLU (population, 7,617), the head-quarters, VADNAGAR (13,716), and UMTA (5,242); and 88 villages. It is level throughout, and is fairly well wooded. The surface soil is for the most part sandy, but there is a little black soil. The Khāri flows through it from east to west. In 1904–5 the land revenue was Rs. 42,000.

Balisna.—Town in the Pātan *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 49′ N. and 72° 15′ E. Population (1901), 4,650. It is the seat of the Leva Kunbīs, and possesses a vernacular school.

Bechrāji.—Temple in the Kadi *prānt*, Baroda State, situated about 23 miles from the town of Kadi, and about the same distance from Modhera. The temple has been built in the jungle, and is surrounded by large and costly works designed for the accommodation of pilgrims and others, wells, tanks, *dharmsālas*, dispensary, &c. In the months of Aswin (September–October) and Chaitra (March–April) crowds of devotees visit the shrine from all parts of Gujarāt and make their offerings to the goddess. From these offerings and from the rich endowments given by former Gaikwārs the expenses of the temple are met.

Chānasma.—Head-quarters of the Vadāvli *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 43′ N. and 72° 10′ E. Population (1901), 8,183. It possesses local offices, a dispen-

sary, a magistrate's court, and a vernacular school. The municipal board receives an annual grant of Rs. 1,700. Chānasma is famous as containing the largest Jain temple in the Gaikwār's territory. The building, which is said to have cost 7 lakhs, is made almost entirely of Dhrāngadhra stone, profusely carved, while the interior is adorned with marble flooring.

Dehgām.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 11′ N. and 72° 52′ E., on the Ahmadābād-Parāntīj Railway. Population (1901), 4,884. It possesses a magistrate's court, dispensary, vernacular school, and local offices. A sword-making industry on a small scale exists. The municipality receives an annual grant of Rs. 2,000.

Kadi Town.—Head-quarters of the *tāluka* and *prānt* of the same name, Baroda State, situated in 23° 18′ N. and 72° 2′ E., on the Gaikwār's State line from Kālol on the Rājputāna-Mālwā Railway. Population (1901), 13,070. It is a place of some importance in the State, owing to its connexion with Malhār Rao, who held it as *jāgīrdār* and rebelled against the Gaikwār Govind Rao. Till 1904 it was the head-quarters of the Kadi *prānt*. The town seen from a distance presents rather a picturesque appearance, the domes of the fort gleaming from the thick wood which surrounds it. To the north lies a broad sheet of water fringed with trees, and on the edge which touches the houses the domed gate or Gumit Darwāza is effectively placed. The fort itself stands on a slight elevation; and its brick walls and numerous buttresses, though they enclose no great area, are of enormous thickness and in a good state of preservation. The chief buildings inside the fort are the Rang and Supra Mahals, while behind it is the palace or *sarkārvāda*, which was formerly occupied by the *Sūbah's* and other offices. In addition, the town possesses a civil hospital, courts, jail, Anglo-vernacular and vernacular schools, and various *dharmsālas* and temples. Its narrow streets contain gaudily painted houses, lavishly decorated with wood-carving, but the choking dust and the crumbled appearance of the generality of the habitations give Kadi a mournful look. The State makes an annual grant of Rs. 2,700 to the municipality. Several fairs are held during the year, but the trade of the town is not very great. The chief industries are weaving, calico-printing, and the manufacture of brass and copper utensils. The cantonment is at present garrisoned by a detachment of State troops.

Kālol Town.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 15′ N. and

72° 32′ E., on the Rājputāna-Mālwā Railway. Gaikwār's State lines run from here to Vijāpur on one side, and to Kadi on the other. Population (1901), 6,465. Kālol contains Munsif's and magistrate's courts, a dispensary, vernacular school, and local offices. An annual grant of Rs. 1,300 is made to the municipality. The town is the centre of a considerable trade in grain.

Kherālu Town.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 54′ N. and 72° 39′ E., on the Gaikwār's State line from Mehsāna on the Rājputāna-Mālwā Railway. Population (1901), 7,617. The town contains a magistrate's court, dispensary, two *dharmsālas*, local offices, and a vernacular school, and is celebrated for the temple founded by the Vaishnavite reformer Vallabhāchārya, who is said to have dwelt here. It is administered by a municipality, which receives an annual grant of Rs. 1,600 from the State.

Lādol.—Town in the Vijāpur *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 37′ N. and 72° 44′ E. Population (1901), 6,641. It possesses a vernacular school, and has a fair trade in grain.

Mehsāna Town.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 42′ N. and 72° 37′ E. Population (1901), 9,393. The town is chiefly important as a railway centre, for here the Gaikwār's State railways from Kherālu, Pātan, and Viramgām converge to meet the main line of the Rājputāna-Mālwā Railway. It is the most central town in the *prānt*, and in 1904 became the head-quarters in place of Kadi. A magnificent building, which forms a conspicuous object close to the town, has recently been erected, partly for the purposes of public offices and partly as a palace for the Gaikwār. Otherwise there are no buildings of any great mark. Mehsāna is administered by a municipality, receiving an annual grant of Rs. 4,700. It possesses Anglo-vernacular and vernacular schools, a dispensary, magistrate's court, and local offices.

Modhera.—Village in the Vadāvli *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 35′ N. and 72° 8′ E. In ancient times this town must have been very populous and wealthy, judging from the ruins still to be seen. The chief of these is Sītā's Chāvdi or marriage hall, about which Dr. Burgess remarks :—

'The Sītā's Chāvdi is rich in carving beyond anything I have met with elsewhere. The central dome is supported by eight

columns of great elegance with *toranas* between each pair, outside of which are eight similar ones. The *mandapa* is similar to the central dome. The proportions of the building are beautiful, as it is not deficient in height.'

The temple is really dedicated to the Sun, and was probably built early in the eleventh century. Modhera is known in Jain legends as Modherpura or Modhbank Pātan, and it has given its name to the Modha Brāhmans and the Modhas.

Pātan Town.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 51′ N. and 72° 10′ E., on the Gaikwār's State line from Mehsāna on the Rājputāna-Mālwā Railway. Population (1901), 31,402. In former times it was known as ANHILVĀDA or Anhilpur, and was founded about A.D. 746, or, according to some accounts, in 765, by Vanarājā, the forest-born son of the beautiful Rānī, Rūp Sundri. He was the first of a line of kings, named Chāvada, a dynasty which was succeeded by the Solankis, and afterwards by the Vāghelas. The town, afterwards known as Nahrwāra or Nahrwāla, was celebrated for its size and magnificence, and yielded much plunder to Mahmūd of Ghazni. The last of the Vāghelas, Karan Ghelo ('the insane'), was overpowered in 1298 by Ulugh Khān; and the Muhammadans afterwards levelled the walls of the town, buried the temples in their foundations, and ploughed up the ground on which they stood. The modern Pātan has sprung up on the ruins left by the ancient conquerors, but does not possess the magnificent palaces, parks, tanks, schools, libraries, markets, and offices which are said to have adorned the old city. Some remains, however, are still to be seen which indicate the former greatness of Anhilvāda. One of these is the Rānī Vāv or large well, built by Udayamati, the queen of Rājā Bhīma, in the eleventh century, of which a few battered fragments remain. The water is said to possess the power of curing infantile cough. The Sahasra Ling Talāv, or 'tank with the thousand shrines,' was dedicated to Siva by the famous Jay Singh Siddha Rājā of the Solanki line (1093–1143), when he set out on his expedition against Yasovarma, king of Mālwā. But of this nothing now remains, save a large field with the ruins of a Muhammadan building in the centre, constructed on the site of a temple. Bairam, the minister of Humāyūn and Akbar, was assassinated on the bank of this lake in 1561, while on his way to Mecca. A marble statue of Vanarājā, the founder of the city, in one of the Jain temples, bears an inscription dated 1467. Another tank worthy of notice is the large reservoir to the south of the

town, known as the Khān Sarovar, which, however, is of Muhammadan origin. The modern town of Pātan, together with the citadel, is the result of Marāthā efforts. It is situated to the south-east of old Anhilvāda, nearly a mile from the Saraswatī river. A lofty wall, most of which is of great thickness, entirely surrounds it, and there are numerous gateways. The public buildings, of which the chief are the offices in the citadel, the high school, and the civil hospital, are of no great interest, and the general aspect of the streets and houses, with the exception of a few which display profuse and elaborate wood-carving, is depressing. The Jain temples in the town are said to number 108 or 110, but none is of much architectural or archaeological importance. In these thousands of palm-leaf manuscripts are carefully preserved, of which a list has recently been made. The manufactures carried on at the present day are not of great importance, though there is a fair out-turn of swords, betel-nut slicers, *patolas* (variegated *sārīs*), embroidery, and pottery. The last is said to be superior to any of its kind in Gujarāt, and is remarkable for its glaze. It is, however, of a very fragile nature. Wood-carving and ivory-turning are also practised. The town is the most important centre for trade in the Kadi *prānt*, and its commercial facilities have been greatly increased since the opening of the line from Pātan to Mehsāna. The municipality, which was reconstituted on a partly elective basis in 1905, has an income of Rs. 10,000 from excise, customs, and tolls, besides an annual grant of Rs. 5,000 from the State.

[J. Burgess and H. Cousens, *Architectural Antiquities of Gujarāt* (1903).]

Sidhpur Town.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 55′ N. and 72° 26′ E., on the Saraswatī river, with a station on the Rājputāna-Mālwā Railway, 64 miles north of Ahmadābād. Population (1901), 14,743. Sidhpur, which was formerly known as Srīsthala, is a town of much religious importance and is frequented by great crowds of Hindu pilgrims. They resort here because it is said to be the only place where *shrāddha* can be performed for the propitiation of the manes of deceased mothers. What Gayā is for the fathers, Sidhpur is for the mothers.

A. K. Forbes in his *Rās Māla* has described the celebrated Rudra Mahālaya or Māla, founded in the tenth century by Mūlarājā, and reconstituted by Jay Singh Siddha Rājā, once the glory of Sidhpur, but now only a massive ruin :—

'The Rudra Māla was a very large edifice of the usual form and apparently three storeys high. In the centre of three sides of the *mandapa* projected two-storeyed porticoes called *rūp choris*; on the fourth the adytum, a most massive structure rising to the extreme height of the central building, and then mounting beyond it into a *sikara* or spire. On either side stood a *kīrtti stambha* or triumphal pillar, one of which exists in a nearly perfect state. Two richly adorned columns support an entablature and sculptured pediment. Above the brackets, formed of the heads of marine monsters, springs a delicately chiselled arch called the *torana* or 'garland.' The temple stood in the centre of an extensive court, to which access was given by three large gate-houses, that in front opening on to the terrace leading to the river. The rest of the surrounding wall was composed of numerous lesser shrines, three of which remain and have been converted into a Muhammadan mosque.'

But the work of destruction has proceeded rapidly since the time of Forbes, and now there is little left save gigantic stones with superb carving to show the former magnificence of the great temple. Opposite Sidhpur and across the river is a large square building forming a *dharmsāla* of Kewalpuri Gosains. The town also contains numerous other temples, and several tanks, one of which, the Bindu Sarovar, is held peculiarly holy. The tortuous and narrow streets, the crowded houses, and the population too great for the area inhabited, unite in making Sidhpur an unattractive town for all except the Audīchya Brāhmans, who derive comfortable incomes from this holy place, and the Bohrās. The latter are merchants who carry on business in Burma, Zanzibar, &c., and then retire to Sidhpur to spend the rest of their existence in their well-built houses and pleasant gardens. The town possesses a magistrate's court, Anglo-vernacular and vernacular schools, a dispensary, and the usual public offices. It is administered as a municipality, which was reconstituted on a partly elective basis in 1905, and has an income of Rs. 6,500 from customs, excise, and tolls. The chief arts are dyeing and printing of cloth, but the wood-carving on the houses is also worthy of notice. Sidhpur is chiefly known as being the centre of the poppy-growing tract in Baroda, and the place where the State manufactures opium.

Umta.—Town in the Kherālu *tāluka*, Kadi *prant*, Baroda State, situated in 23° 47′ N. and 72° 33′ E. Population (1901), 5,242. It possesses a vernacular school.

Unjhā (or Unza).—Town in the Sidhpur *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 49′ N. and 72° 26′ E., on the Rājputāna-Mālwā Railway, 56 miles north of Ahmadābād,

and 8 miles south of Sidhpur. Population (1901), 9,800. Unjhā is probably the original seat in Gujarāt of the Kadwa Kunbīs, who migrated from Mārwār in the time of the Rājput kings. The Kadwa Kunbīs now constitute about a third of the total population. Among them marriages take place only once in every ten or twelve years, when a large number of them enter the matrimonial state. All girls of the caste more than forty days old must be married on one or other of certain fixed days; and should no husband be found, a proxy bridegroom is sometimes set up and married to a number of girls, who immediately enter a state of nominal widowhood until an eligible suitor appears, when the parents give them in *natra* or second marriage. More frequently even the proxy is dispensed with, and little girls are married to bouquets of flowers, which are treated as actual bridegrooms during the ceremonies and then thrown into a well. The town is managed by a municipality, which receives an annual grant from the State of Rs. 2,000. It possesses Anglo-vernacular and vernacular schools, two *dharmsālas*, local offices, and the large temple of the Kadwa Kunbīs. A well-attended fair is held here once a year.

Vadnagar.—Town in the Kherālu *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 48′ N. and 72° 40′ E., 8 miles north-east of Visnagar, on a branch of the Gaikwār's State Railway from Mehsāna. Population (1901), 13,716. According to legendary accounts, Vadnagar was founded by a prince of the Solar dynasty who abandoned his native country, of which Ajodhyā was the capital, in A. D. 145 and wrested a dominion from a prince of the Paramāra clan. The town probably occupies the site of Anandapura, the original home of the Nāgar Brāhmans, though few reside here now. Hiuen Tsiang describes a place of this name as very populous in the seventh century, and Abul Fazl mentions Vadnagar as a place of great note with 3,000 idolatrous temples, attached to each of which was a tank. The walls of the town, according to an inscription, were built by Kumāra Pāla in 1152. Formerly the town had the unenviable reputation of being a chartered refuge for an infamous class of robbers, the Dhinoj Brāhmans. These paid a tax to the State; and their robberies and other misdeeds outside Baroda territory were winked at, until at the request of the Bombay Government the Dārbar withdrew its protection in the time of Sayāji Gaikwār II. There are still about 200 families of Dhinoj Brāhmans, but they lead a quiet life and generally resort to Bombay either for employment or

as traders. The town now presents a poor appearance, though it is in some ways picturesque. The view from the railway showing the lofty walls, with the houses perched above on rising ground, is especially fine. The temple of Hātkeshwar Mahādeo, held in great reverence by the Nāgar Brāhmans, lies to the west of the town. On the opposite side is the large Sarmishta tank, of a circular shape, with an island in the centre, and embanked with stone walls and steps. Close to the tank is a *chāvdi*, remarkable for its large and substantial stone pillars and arches ornamented with rich carving. The two *kirtti stambhas* or triumphal pillars closely resemble in design and workmanship those of the Rudra Māla at Sidhpur, but are in a better state of preservation. The town possesses the usual public offices, a dispensary, Anglo-vernacular and vernacular schools, together with numerous temples and *dharmsālas*. It is administered as a municipality, with an annual grant from the State of Rs. 2,800.

Vālam.—Town in the Visnagar *tāluka*, Kadi *prānt*, Baroda State, situated in 23° 42′ N. and 72° 30′ E. Population (1901), 5,337. It possesses a vernacular school.

Vijāpur Town.—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 34′ N. and 72° 47′ E., on a branch of the Gaikwār's State Railway from Kālol on the Rājputāna-Mālwā main line. Population (1901), 8,510. It possesses Munsif's and magistrate's courts, dispensary, vernacular school, and local offices. The municipality receives an annual grant from the State of Rs. 1,700.

Visnagar Town (or Vīsalnagar).—Head-quarters of the *tāluka* of the same name, Kadi *prānt*, Baroda State, situated in 23° 41′ N. and 72° 33′ E., on a branch of the Gaikwār's State Railway from Mehsāna to Kherālu. Population (1901), 17,628. Of the origin of the town various accounts have been given. One is that it was founded by Vīsal Deva, the Vāghela prince, between 1243 and 1261; another that its foundation was due to Vīsal Deva, the Chauhān, about 1046. Visnagar is the original seat of one of the six classes of Nāgar Brāhmans, and gives its name to a subdivision known as Visnagar Brāhmans; many of these are now followers of Swāmi Nārāyan, the religious reformer from CHHAPIĀ in the United Provinces. The town contains the court of the Kadi *prānt* judge, a jail, dispensary, vernacular and Anglo-vernacular schools, and other public offices, together with numerous *dharmsālas* and temples. A stone-built tank is also deserving of notice. The municipality, which was reconstituted in 1905 on a partly elective

basis, has an income of Rs. 5,000 from customs, excise, and tolls, besides an annual grant from the State of Rs. 2,000. Visnagar is a great centre of trade, but is not famous for any special manufacture except that of brass and copper utensils. These are exported in large quantities to Ahmadābād, Kāthiāwār, Baroda, and even Bombay.

Boundaries and physical aspects.

Baroda Prānt.—A *prānt* or district of the Baroda State, lying between 21° 50′ and 22° 45′ N. and 72° 35′ and 73° 50′ E., with an area of 1,887 square miles. It is bounded on the north by the Kaira District of Bombay; on the west by Broach, Cambay, and part of Kaira; on the south by Broach and the Rewā Kāntha; and on the east by the Rewā Kāntha and the Pānch Mahāls. Most of the *prānt* forms a compact block between the Narbadā and the Mahī, but the Petlād *tāluka* lies separate, north of the latter river. The southern portion of the *prānt* is largely composed of black soil, which, though fertile, produces few trees. In the north the red soil is thickly wooded. The *prānt* is either traversed or skirted by the rivers Mahī, Dhādhar, Narbadā, Vishwāmitri, Suryā, Meni, Or, Hiran, Unchh, and Oswan.

Botany.

The country is largely under cultivation, and the vegetation therefore consists chiefly of the crops with their accompanying weeds. The hedges enclosing fields consist of shrubs like *Maerua*, *Cadaba*, *Diospyros*, *Celastrus*, with occasionally fleshy species of *Euphorbia*; associated with these shrubby species are trees of *Bombax malabaricum*. The climbing plants in the hedges include species of *Leguminosae*, *Convolvulaceae*, *Menispermaceae*, and *Asclepiadaceae*. In waste places and on waysides occur *Tephrosia purpurea*, *Heylandia latebrosa*, *Waltheria indica*, *Hibiscus Gibsoni*, *Argemone Mexicana*, and similar species. In the neighbourhood of dwellings are seen mangoes, tamarinds, *baels*, several species of *Ficus*, *Anona squamosa*, *Jatropha Curcas*, and other more or less useful planted or subspontaneous species.

Population.

The population in 1872 was estimated at 747,437, and in the next two enumerations it was: (1881) 761,501, (1891) 817,023; while in 1901 it was only 644,071, of whom 523,999 were Hindus, 36,713 Animists, 64,148 Musalmāns, and 10,916 Jains. The terrible diminution in the population was due to the disastrous effects of famine and plague. The *prānt* is divided into nine *tālukas* and two *petas* or sub-*tālukas*, the population of which in 1901 is shown in the table on the next page.

The principal towns are BARODA CITY, PETLĀD, DABHOI, SOJITRĀ, VĀSO, PĀDRA, NAR, PIHIJ, and SINOR. Gujarātī is

spoken by 93 per cent. of the population, and Hindustāni by 5 per cent., while nearly a fourth of the inhabitants of the city use Marāthī. In 1901 the *prānt* contained 6,943 native Christians. The American Methodist Episcopal Mission has adherents in 125 villages and towns, numbering approximately 5,200. In addition to two orphanages, it provides a training school for teachers and preachers, and fifty-five day-schools.

Tāluka.	Area in square miles.	Number of Towns.	Number of Villages.	Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
Baroda (city excluded)	160	...	110	60,428	332	−37·4	6,375
Pādra	196	1	82	73,395	374	−20·5	6,727
Petlād	181	7	68	134,558	743	−14·1	17,001
Sāvlī	188	1	75	38,340	204	−14·6	3,250
Sisva	83	1	30	43,461	524	−19·4	4,232
Chorānda	284	...	99	48,758	208	−22·2	5,128
Vaghodia	143	...	71	20,804	145	−23·0	1,087
Dabhoi	190	1	102	49,077	258	−17·8	6,319
Sinor	139	1	45	29,979	216	−23·3	4,339
Sankheda	280	2	190	36,665	159	−35·7	3,072
Tilakwāda	34	1	32	4,816	141	−48·2	304
Total	1,878	15	904	540,281	288	−22·9	57,834
Baroda City with Cantonment	9	2	...	103,790	11,532	−12·2	21,678

The prevailing black soil is very fertile, and requires little manure or irrigation, while *gorāt* or sandy loam needs both. The Petlād *tāluka* is noted for the cultivation of tobacco. The chief crops are rice, *bājra*, *jowār*, wheat, *math*, gram, *adad*, *tuver*, *val*, *chola*, *tal*, *diveli*, cotton, sugar-cane, *kasumbo*, and tobacco. Many other minor crops and vegetable products are raised for local consumption. Agriculture.

The weaving of coarse cotton cloth is the chief industry. But in addition may be mentioned the manufacture of fine turbans at Dabhoi, of cloths at Sojitrā, Petlād, and Bakrol, of embroidery with gold and silver thread at Baroda, and of gold and silver ornaments in most towns. Iron-work is poor, but good locks are made at Petlād, Sojitrā, and Vāso. Excellent brass and copper pots are manufactured everywhere. The only cotton-mill is at Baroda, but there are twenty-six ginning factories. A dyeing factory has been working at Petlād for some years. The chief centres of trade are Baroda, Dabhoi, Chāndod, and Petlād, which are connected by rail. The *prānt* is well provided with communications, as the main Industries, trade, &c.

line of the Bombay, Baroda, and Central India Railway runs from north to south, with a State branch from Anand to Petlād and Cambay, and narrow-gauge lines connect Dabhoi with Bodeli, Chāndod, Sinor, and Mobha. In addition, the Baroda-Godhra chord line on the broad gauge crosses the *prānt*. The chief roads are those from Baroda to Pādra, Makarpura, Ajwa, and Sāvli, from Petlād to Sojitrā, and from Chāndod to Sinor.

Land revenue.

The land revenue decreased from 37·9 lakhs in 1881 to 36·8 in 1891, but rose to 39·8 lakhs in 1901. In 1904–5 the demand was 30·7 lakhs, but owing to famine only 23·8 lakhs was collected. The average assessment per *bīgha* (4/7 acre) varies from about R. 0–3–9 in Pādra to Rs. 4 in Sinor. The *prānt* was settled for fifteen years between 1888 and 1893, and a revision is now in progress.

Local self-government.

Besides Baroda city the *prānt* contains ten municipalities: namely, Dabhoi, Petlād, Pādra, Sinor, Sojitrā, Vāso, Sāvli, Bhādran, Sankheda, and Makarpura. Their funds, amounting to Rs. 14,800 in 1904–5, besides the income from customs, excise, and tolls in Dabhoi, are provided by the State. A District board and local boards were constituted in 1905.

Administration.

The *prānt* is administered by the *Sūbah*, whose head-quarters are at Baroda city. The *prānt* Judge also holds his court at the same place.

Education and medical.

Education is well provided for, there being a college in Baroda city and also a high school, while the number of Anglo-vernacular schools is 6, and of vernacular schools 476. These schools were attended in 1904–5 by 35,780 pupils. The *prānt* contains a civil hospital, a leper hospital, a lunatic asylum, and 10 dispensaries, in which 131,322 patients were relieved in 1904–5, of whom 1,044 were in-patients.

Baroda Tāluka.—Central *tāluka* of the Baroda *prānt*, Baroda State, with an area of 160 square miles. Excluding the city, the population fell from 96,387 in 1891 to 60,428 in 1901. It contains 110 villages, besides the city and cantonment. The *tāluka* is a level plain watered by five rivers, the Mahī, Meni, Rungal, Jāmbva, and Vishwāmitri. The prevailing soil is black, though two other classes, *gorāt*, or sandy loam, and *besār*, a mixed soil, are found interspersed with it. The chief crops grown are *dāngar*, *jowār*, *bājra*, *tuver*, *tal*, *math*, *shiālu*, and cotton. In 1904–5 the land revenue was Rs. 3,68,000.

Pādra Tāluka.—Western *tāluka* of the Baroda *prānt*, Baroda State, with an area of 196 square miles. The popula-

tion fell from 92,328 in 1891 to 73,395 in 1901. The *tāluka* contains one town, PĀDRA (population, 8,289), the headquarters, and 82 villages. It is a plain with numerous trees, bounded on the north and south by two rivers, the Mahī and the Dhādhar. The soil is mainly of three kinds: *gorāt* or light red, black, and *besār*, a mixture of the two. The *gorāt*, which constitutes nearly three-fourths of the whole, is very rich. The chief crops produced are *bājra*, *math*, *jowār*, *tal*, *tuver*, *dāngar*, cotton, wheat, gram, and tobacco. In 1904–5 the land revenue was Rs. 3,94,000.

Petlād Tāluka.—*Tāluka* in the Baroda *prānt*, Baroda State, lying to the north of the river Mahī, intersected by parts of Kaira District, with an area of 181 square miles. The population fell from 157,786 in 1891 to 134,558 in 1901. It contains 7 towns, PETLĀD (population, 15,282), the headquarters, SOJITRĀ (10,578), VĀSO (8,765), NAR (6,525), PIHIJ (5,282), DHARMAJ (4,827), and BHĀDRAN (4,761); and 68 villages. The *tāluka* consists mostly of a level plain, without rivers and woods, but with numerous trees lining the fields or clustering about the villages. About one-fourth of the soil is black, one-half is light red or *gorāt*, and the remainder a mixture of these called *besār*. The *tāluka* is specially known for its excellent tobacco. In 1904–5 the land revenue was Rs. 4,83,000.

Baroda City.—Capital of the Baroda State, situated in 22° 18′ N. and 73° 15′ E., on the Vishwāmitri river, 244½ miles from Bombay by rail, and 61½ miles south-by-south-east of Ahmadābād. The population at each Census in the last twenty years was: (1881) 106,512, (1891) 116,420, and (1901) 103,790. In 1901 Hindus numbered 80,834, Musalmāns 18,770, and Jains 2,266.

The municipal board, reconstituted in 1906, has an annual income of about 2 lakhs, derived from octroi, fines levied for permission to erect new houses, &c., sales of land, and a conservancy tax. In 1904–5 the expenditure was 2·4 lakhs, the chief items being roads (Rs. 91,000), conservancy (Rs. 61,000), and administration (Rs. 32,000). The aspect, comfort, and health of the city have recently been considerably improved. A free supply of filtered water, supplied from the Ajwa reservoir, is distributed to every street by means of pipes. Drainage works are being constructed to carry off storm water and sullage from the houses. New roads have been constructed, old roads have been made wider, new buildings have been erected on every side, old and inconvenient ones have

been removed, the streets are clean and well
servancy is carefully attended to.

eneral
escrip-
on.

The city proper is enclosed by the old
It is approached from the railway station b
at first broad and straight, gradually becom
more tortuous. Close to the station is
building erected for the Baroda College, at
than 6 lakhs. It is situated in a spacious c
also contains residential quarters for students,
garden, a cricket ground, a tennis court, ar
A little farther is the entrance of the public
the Vishwāmitri stands the Countess of D
a handsome modern building, with ward
patients, and the Victoria Jubilee ward for
Just beyond it, and on the same side, is
Military Hospital, for the reception of th
regiments of the Baroda forces. In the sul
stands the house of the famous minister C
while close by a steep ascent up a short hill
called the Jūna Kot, or old fort, probably
portion of the Hindu town of Baroda. The
of the State are located here, and just opp
Survey office. A large building has recently
for the safe custody of records. The State
but handsome erection, is close to the reco
the Laharipura or western gate a broad and
leads through the city to the clock-tower.
to this street branch off *pols* or wards belo
classes and castes of people, and formin
entrances of which are barred by heavy doo
clock-tower is the old palace in which the
formerly; and immediately behind it, rising
rounding buildings, stands the white stucco N
which was erected by the Mahārājā M
Gaikwār's jewels, which are stored here, h
at over 3 crores. They include a diamo
of the stones of which is known as 'the S
a brilliant of perfect water weighing 125 carats
estimated to be worth 9 lakhs, and a c
with precious stones and seed pearls which
cover the Prophet's tomb at Mecca. Not f
Bāgh is an old building containing a fine li
Sampat Rao Gaikwār. The Nazar Bāgh a
tion of the Laharipura street, terminating

Water-gate. On its southern side are the military office, and the lines where the gold and silver guns are kept. Just beyond the Water-gate is the arena where public sports are still held. From the clock-tower a road leads to the Chāmpāner gate, and another to the Rhinoceros or south gate. Near the western gate is the Sursāgar, a large reservoir of water with stone banks, and masonry steps in places. The length of this tank is 1,057 feet, its width 665 feet, and its average depth 12 feet. In the neighbourhood is the Chimnābai Nyāya Mandir, or 'temple of justice,' occupied by the High Court, and named after the late Mahārānī Chimnābai. Close to it are two other fine structures, the female training-college and the Anglo-vernacular school. Another educational building is the Kala Bhavan, a technical institution where students learn dyeing, weaving, carpentry, smithy-work, drawing, &c. The Central jail is a carefully constructed building arranged on modern principles. The public park contains a museum, beautiful gardens, and a collection of wild animals. Just beyond the park is the lunatic asylum, a new and spacious building.

Palaces. Besides the Nazar Bāgh palace, the Makarpura palace is situated about 4 miles to the south of the city. It was originally erected by Khande Rao, but has been much enlarged and improved. It is now surrounded by fine gardens containing fountains, grottoes, and pergolas, and is used by the Mahārājā as a country residence. The chief palace is, however, the Lakshmī Vilās, a building in the Hindu-Saracenic style, which cost about 60 lakhs. It contains a large Darbār hall, with mosaic decorations on the walls and a mosaic floor specially executed by Italian workmen, and covered wooden galleries reserved for ladies. The palace is well furnished, and contains bronze statues and costly paintings by European artists. The grounds have been laid out by an English landscape gardener, and add greatly to the attractiveness of the palace.

Temples. There are many other objects of interest in Baroda, of which perhaps the most notable are the Hindu temples which crowd the city. Close to the stone bridge which crosses the Vishwāmitri are the temples raised to the memory of several members of the Gaikwār family, as well as two temples to Mahādeo. Other temples of importance are Bande's, which has the largest allowance from the State; the Sidhnāth temple, Lakshman Bava's Mandir, Kālikā's temple, and Bolai's temple, all of which are supported by the State. There are also the

temples of Khandoba, the tutelary god of the Gaikwār family, and those of Bechrāji and Bhīmnāth, where Brāhmans undergo penance for the spiritual welfare of the Mahārājā's house. Ganpati's Mandir and the temple to Kāshi Vishveshvar mark the liberality and religious aspirations of the late Gopāl Rao Mairāl, banker, financier, and minister. The chief Gujarāt temples are those of Narsinhji, Govardhan-Nāthji, and Baldevaji, while high above all other buildings in the city, except the Nazar Bāgh, towers the temple built by the followers of Swāmi Nārāyan.

There is no characteristic art in Baroda deserving of special mention. A few artisans are proficient in wood-carving, some in lacquer-work, and some in iron grille work suitable for balcony railings. Calico-printing is also carried on to meet the demand for cheap cotton *sārīs*. Embroidery with gold and silver thread of a superior description is produced to a small extent. A cotton spinning and weaving-mill built by the State was transferred to a private firm in 1905, and other mills are being built.

Cantonment.

The cantonment or Camp lies north-west of the city, from which it is separated by the Vishwāmitri. Its area is about 2 square miles, and its population (1901) 3,162. The garrison consists of a regiment of native infantry belonging to the Indian army. In or near the cantonment are the church consecrated by Bishop Heber in 1825, the Residency (just outside the boundary line), a stone column raised to the memory of Mr. Williams a former Resident, the American Methodist Episcopal Church and orphanages (280 boys, 260 girls), vernacular schools for boys and girls, and a school for European children maintained by the Government of India and the Baroda State jointly.

Bhādran.—Town in the Baroda *prānt*, Baroda State, situated in 22° 22′ N. and 72° 55′ E. Population (1901), 4,761. It is the head-quarters of the Sisva *peta*, a sub-*mahāl* of the Petlād *tāluka*, and possesses a municipality, magistrate's court, vernacular school, and local offices. The inhabitants are chiefly engaged in the cultivation of tobacco, but there is also a fair trade in grain.

Chāndod.—Village and place of pilgrimage in the Rewā Kantha Agency, Bombay, situated in 21° 58′ N. and 73° 29′ E., on the right bank of the Narbadā, 30 miles south-east of Baroda and 12 miles south of Dabhoi, with which it is connected by a section of the Gaikwār's narrow-gauge Dabhoi Railway. Population (1901), 2,613. Close to Chāndod is

the village of Karnāli. Both these villages, with their temples and certain sacred spots on the river, are visited twice a year by more than 20,000 pilgrims. The chief occasions are the full moon of Kārtik (October-November), and the full moon of Chaitra (March-April). What James Forbes wrote (*Oriental Memoirs*) 120 years ago is still true:—

'No place in the western province of Hindustān is reputed so holy as Chāndod: none at least exceeds it; its temples and seminaries almost vie with the fame of Jagannāth and the college of Benares.'

The ownership of the village vests jointly in the Gaikwār of Baroda and the Māndwa chief in Rewā Kāntha.

Dabhoi.—Town in the Baroda *prānt*, Baroda State, situated in 22° 8′ N. and 73° 28′ E., about 18 miles distant from the capital. Population (1901), 14,034. Dabhoi, the Sanskrit Darbhavati of the eleventh century, is one of the most interesting towns in the Gaikwār's dominions, not only from its past history, but also for the beauty of its walls and gates. It was fortified early in the thirteenth century by the Vāghelas; and the town is really a fortress, the walls forming an irregular figure approximating to a square, the north, east, south, and west sides being 1,025, 900, 1,100, and 1,025 yards long, with a round tower at each angle. The height is rather less than 50 feet. These walls are ornamented throughout with sculptured horizontal bands, and the gateways are covered with a profusion of sculptured ornament. Of these latter the finest by far must have been the eastern or diamond gate, concerning which James Forbes, author of the *Oriental Memoirs*, remarked:—

'In proportion of architecture and elegance of sculpture the Gate of Diamonds far exceeds any of the Hindu ancient or modern structures I have met with. This beautiful pile extends 320 feet in length, with proportionate height. Rows of elephants, richly caparisoned, support the massy fabrics. The architraves and borders round the compartments of figures are very elegant; and the groups of warriors, performing martial exercises, on horseback, on foot, and on fighting elephants, approach nearer to the classical bas-reliefs of ancient Greece than any performances I have seen in Hindustān.'

Unfortunately, however, most of this magnificent gate has disappeared, partly through neglect and the action of time, and partly through the ravages of Musalmān bigotry. There are also three other gates of more or less beauty, the most graceful and most perfect being the Chāmpāner gate to the

north of the town. On the right of the Diamond gate the highly finished and very beautiful Bhadra Kālikā Mātā temple is worthy of notice, as well as the minutely carved temple to Mahādeo on the left.

Dabhoi has of late years increased in importance by becoming a railway junction. It is the centre to which the narrow-gauge lines from Miyāgām, Baroda, Chāndod, and Bodeli converge. The present population consists of many castes and creeds, the most prominent being the Sāthodra Nāgars, Dāsa Lād Vāniās and their *purohits* (family priests), the Khedāwāls, the Shrimali Vāniās, the Audīchya Tolakiya Brāhmans, and the Tais. The last are Musalmāns, and are for the most part engaged in weaving, producing turbans, in which there is a large export trade. Silver and copper anklets, besides other articles of copper and brass, are also made here. Wood-carving is carried on to some extent, and there is a good trade in cotton, grain, and the seeds of the *mahuā*. A municipality was constituted in 1905, with an income of Rs. 6,000 from customs, excise, and tolls. The town possesses Anglo-vernacular schools, a dispensary, Munsif's and magistrate's courts, local offices, and a cotton-ginning factory.

[J. Burgess and H. Cousens, *Antiquities of Dabhoi* (Edinburgh, 1888).]

Karnāli.—Village in the Baroda *prānt*, Baroda State, situated in 21° 59′ N. and 73° 28′ E., on the right bank of the Narbadā at its junction with the Orsang river. Population (1901), 1,126. Thousands of pilgrims repair annually to this holy place in order to perform their ablutions in the Narbadā.

Kārvan.—Village in the Baroda *prānt*, Baroda State, situated in 22° 5′ N. and 73° 15′ E., with a station on the Dabhoi-Miyāgām State Railway. In olden times it was probably very important as a place of pilgrimage. The local tradition is that the sage Vishvāmitra, in consequence of a dispute with Vasishta, desired to create another Benares in this village. He therefore fashioned a thousand *lingams* and then wrestled to bring the Ganges here, till Vishnu was weary of his importunities. The god was forced to make himself visible to the saint, who then ceased from vexing him, and in return Vishnu promised that the village should be as holy as Benares. Many temples, some old, some in ruins, are to be seen at this sacred spot.

Miyāgām.—Village in the Chorānda *tāluka*, Baroda *prānt*, Baroda State, situated in 22° 1′ N. 73° 7′ E., on the Bombay, Baroda, and Central India Railway, at the terminus of a State

line from Dabhoi. Population (1901), 2,654. It is inhabited chiefly by Jains, who carry on a thriving trade.

Nar.—Town in the Petlād *tāluka*, Baroda *prānt*, Baroda State, situated in 22° 28′ N. and 72° 45′ E., on the Petlād-Cambay Railway. Population (1901), 6,525. The town possesses a vernacular school and two *dharmsālas*.

Pādra Town.—Head-quarters of the *tāluka* of the same name, Baroda State, situated in 22° 14′ N. and 73° 5′ E., 14 miles from the city of Baroda. Population (1901), 8,289. The town is on the narrow-gauge railway line running from here through Baroda to Dabhoi. It contains Munsif's and magistrate's courts, Anglo-vernacular and vernacular schools, and a dispensary. The municipality receives an annual grant of Rs. 1,700 from the State. The only industries carried on are a little cloth-printing and dyeing; but as Pādra is the centre of a number of prosperous villages there is a fair amount of trade, and the market is good. The town is historically interesting as being the place of detention of some well-known members of the Gaikwār family; in particular, Malhār Rao Gaikwār was confined here just before he exchanged his prison for a throne.

Petlād Town.—Head-quarters of the *tāluka* of the same name, Baroda *prānt*, Baroda State, situated in 22° 29′ N. and 72° 50′ E., on a broad-gauge line from Anand on the Bombay, Baroda, and Central India Railway to Cambay. Population (1901), 15,282. Petlād contains a *naib-sūbah's* office, a civil court, jail, Anglo-vernacular and vernacular schools, a dispensary, library, and numerous *dharmsālas* and temples. It is administered as a municipality, with an annual grant from the State of Rs. 3,100. Being the centre of a tobacco-producing tract, a prosperous trade is carried on in that product; and there is in addition a considerable manufacture of cloth, brass and copper pots, and locks.

Pihij.—Town in the Petlād *tāluka*, Baroda *prānt*, Baroda State, situated in 22° 40′ N. and 72° 49′ E. Population (1901), 5,282. The town possesses a vernacular school.

Sankheda.—Town in the *tāluka* of the same name, Baroda *prānt*, Baroda State, situated in 22° 9′ N. and 73° 37′ E., on the left bank of the Orsang river. Population (1901), 4,296. The town possesses Munsif's and magistrate's courts, other local offices, a dispensary, and a vernacular school. It is administered as a municipality, with an annual grant from the State of Rs. 800. The only object of interest is an old fort, which surrendered to a small force of British troops in 1802. The calico-printing, lacquer-work, dyeing, and wood-carving of

Sankheda have a local celebrity. There is also an export trade in seeds and *mahuā* flowers.

Sāvli.—Head-quarters of the *tāluka* of the same name, Baroda *prānt*, Baroda State, situated in 22° 34′ N. and 73° 15′ E. Population (1901), 4,687. It possesses Munsif's and magistrate's courts, a vernacular school, dispensary and small local offices, and is administered as a municipality, receiving an annual grant from the State of Rs. 1,000. A considerable trade in grain and cattle is carried on, and the town is the commercial centre of a wide group of villages. In the immediate neighbourhood are large tanks, shady trees, and fruitful fields; at no great distance is the wild *mehwāsi* country of ravines and jungles bordering the Mahī. At one corner of the Sāvli tank stand two temples which commemorate the names of Dāmāji Gaikwār and his father Pilāji. The latter was assassinated at Dākor in 1732, but his body was carried away from that place by his followers, and the last honours were hurriedly paid it at Sāvli. The treacherous murder, the invasion of Abhai Singh, and the hasty funeral of the founder of the Gaikwār's house mark a crisis in the history of the Marāthā conquest, and give something of historic dignity to the unpretending temple of Pilāji.

Sinor.—Head-quarters of the *tāluka* of the same name, Baroda *prānt*, Baroda State, situated in 21° 54′ N. and 73° 23′ E. Population (1901), 5,186. It possesses Munsif's and magistrate's courts, vernacular schools, local offices, four *dharmsālas*, and several temples. The municipality receives an annual grant from the State of Rs. 1,100. Sinor is delightfully situated on the Narbadā, and a noble flight of 100 stone steps leads from the houses to the water-side. The earthwork of a railway line from Miyāgām has been completed.

Sojitrā.—Town in the Petlād *tāluka*, Baroda *prānt*, Baroda State, situated in 22° 32′ N. and 72° 46′ E. Population (1901), 10,578. In ancient times Sojitrā was the seat of rule of a Rājput principality. The town is administered by a municipality, receiving an annual grant from the State of Rs. 2,200, and possesses Anglo-vernacular and vernacular schools, a dispensary, and the usual public offices. Weaving and the manufacture of brass and copper pots and locks are the chief industries, while a little wood-carving is done, and there is a flourishing trade in tobacco and grain. The *patidārs* who live in and close to Sojitrā form a vigorous and intelligent community.

Vāso.—Town in the Petlād *tāluka*, Baroda *prānt*, Baroda State, situated in 22° 40′ N. and 72° 46′ E. Population (1901),

8,765. Weaving and the manufacture of locks and brass and copper pots are the chief industries. The town contains Anglo-vernacular and vernacular schools, an industrial school, and a second-class magistrate's court. It is administered as a municipality, with an annual grant from the State of Rs. 1,800.

Navsāri Prānt.—A *prānt* or district of the Baroda State. It is the most southerly of the four *prānts* into which the Gaikwār's territory is divided, and is much intermingled with the British District of Surat. It is bounded on the north by Broach and the Rewā Kāntha Agency; on the south by Surat District, Bānsda, and the Dāngs; on the east by Khāndesh; and on the West by Surat and the Arabian Sea. Its area is 1,952 square miles, and it is traversed by the Kim, Tāpti, Mindhola, Pūrna, and Ambikā rivers. Two natural divisions may be mentioned, the *rāni* or forest *tālukas*, and the *rāsti* or peaceful and populous *tālukas*. The climate of the former is at all times malarious, though least so in the hot season, and the water is full of organic matter; but the *rāsti mahāls* are considered to be healthy. The *rāni tālukas* lie in the east, and contain ranges of hills varying from 400 to 2,000 feet above sea-level, while the peak of Sālher rises to 5,263 feet. Hot springs are found at Unhai in the Vyāra *tāluka*. Boundaries and physical aspects.

The land is largely under cultivation, especially on the lower ground. Where the general surface is fairly raised above the level of streams, there is a good deal of grass and a fair quantity of *Cassia auriculata*. The hedges round fields include various species of *Capparideae*, such as *Maesua*, *Cadaba*, and *Capparis*, with several *Euphorbiaceae*, such as *Euphorbia antiquorum* and *Jatropha Curcas*, and species of *Zizyphus* and *Grewia*; *Streblus asper* is also frequent. The climbers in these hedges include *Leguminosae* like *Canavalia*, *Asclepiadaceae* like *Deamia*, and various *Convolvulaceae*. Weeds in waste ground include *Argemone mexicana*, *Tridax procumbens*, *Achyranthes aspera*, *Calotropis gigantea*, and *Tephrosia purpurea*; field weeds include such species as *Biophytum sensitivum*, *Blumea eriantha*, *Launaea nudicaulis*, *Stemodia viscosa*, *Panicum prostratum*, and *Dinebra arabica*. In the neighbourhood of dwellings are many planted or sub-spontaneous species, such as mango, tamarind, banyan, *pīpal* and other species of *Ficus*, *Anona squamosa*, and *Artocarpus integrifolia*. Botany.

The population was estimated in 1872 at 241,255. At later enumerations it was: (1881) 287,549, (1891) 319,443, and (1901) 300,441. In the last year Hindus numbered 126,624, Animists 138,034, Musalmāns 25,451, and Pārsīs 7,589. The

prānt is divided into eight *tālukas* or *mahāls*, and two *petas* or sub-*mahāls*, statistics regarding which in 1901 are shown below :—

Tāluka.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Navsāri . .	125	1	60	59,875	479	+ 11·9	11,476
Gandevi . .	46	2	28	30,920	672	− 5·8	3,905
Mahuva . .	143	...	69	33,720	236	− 5	1,646
Vyāra . .	360	1	153	44,237	123	−17	1,518
Songarh . .	344	1	152	28,217	82	− 4·9	642
Vājpur . .	460	...	91	6,218	14	−26·8	.175
Velāchha . .	149	...	58	22,567	151	−11·1	1,172
Vākal . .	78	...	34	7,922	102	−25·7	98
Kāmrej . .	156	1	75	41,479	266	− 7·3	4,921
Palsāna . .	91	...	52	25,286	278	+ 0·1	2,811
Total	1,952	6	772	300,441	154	− 5·9	28,364

The number of towns is 6 and of villages 772, the former being NAVSĀRI, VYĀRA, GANDEVI, BILIMORA, KĀTHOR, and SONGARH. About 75 per cent. of the population speak Gujarātī, and 21 per cent. various Bhīl dialects. The chief Animistic tribes are the Gāmits (38,000), Dublās (28,000), Chodhrās (23,000), Bhīls (16,000), and Dhodias (1,000).

Agriculture.

The soils are classified as light sandy loam or *gorāt*, and black soil, with an intermediate class known as *besār*. *Gorāt* produces all kinds of 'dry' crops, and when watered and manured is valuable. Rice and cotton are the chief products in the black soil. The principal crops grown are *jowār*, rice, wheat, *bājra*, *kodra*, *nāgli*, *bāvto*, *tuver*, *vāl*, peas, gram, *mag*, *math*, *udid*, *diveli*, *tal*, cotton, hemp, tobacco, sugar-cane, plantain, *bhoising*, &c. The most valuable stock are the large powerful cattle known as *hedia*.

Forests.

This *prānt* is noted for its forests, the area of the Reserves being 547 square miles. These are now under a system of strict conservancy and yield a considerable income. The chief timber trees are teak, *shīsham* (*Dalbergia Sissoo*), *khair* (*Acacia Catechu*), *bia* (*Pterocarpus Marsupium*), *haladvan* (*Adina cordifolia*), *temru* (*Diospyros melanoxylon*), and *sadad* (*Terminalia tomentosa*).

Industries, trade, &c.

The chief industry is the weaving of cotton cloth. Embroidery to a small extent, the manufacture of gold ornaments, a little rough iron-work, brass and copper work, wood and ivory carving, are also carried on. But though arts and manu-

factures are scanty, trade and commerce flourish fairly well. The agricultural and forest wealth is great; and there is a considerable export of toddy, plantains, sugar-cane, rice, *jowār*, molasses, sugar, teak, *sadad*, and other produce. The import trade too is good, the chief articles being European piece-goods, stationery, iron-ware, glass-ware, umbrellas, and brass and copper vessels. Trade is carried on partly by sea from Bilimora and Navsāri, but chiefly by railway. In this latter respect the *prānt* is well served, for the Bombay, Baroda, and Central India Railway runs from north to south, and the Tāpti Valley Railway crosses it from east to west. Roads lead from Sayan to Kāthor, Bilimora to Gandevi, Kosamba to Velāchha, Maroli to Navsāri, and Vyāra to the Unhai hot springs.

Land revenue.

The land revenue increased from 19·5 lakhs in 1881 to 21·4 lakhs in 1891, but fell to 19·3 lakhs in 1901. In 1904–5 the demand was 16·4 lakhs, of which 15·7 lakhs was collected. Most of the *prānt* was settled between 1896 and 1903, and the assessment of portions is now being revised. In a few villages in the Songarh *tāluka* land was formerly assessed on the number of ploughs used in cultivation, but this method has been replaced by the ordinary system. The average assessment in different *tālukas* varies from Rs. 1–4 to Rs. 3–2 per *bīgha* ($\frac{4}{7}$ acre) for 'dry' land, and from Rs. 3–9 to Rs. 5–12 for 'wet' land.

Local self-government.

The *prānt* contains six municipalities, two of which—Navsāri and Gandevi—have partly elective boards, with a total income of Rs. 12,000 from customs, excise, and tolls, besides a grant of Rs. 5,500, while the other four—Bilimora, Kāthor, Vyāra, and Songarh—derive their income of Rs. 4,000 entirely from grants from the State. A District board and local boards were constituted in 1905.

Administration, &c.

The administration of the *prānt* is carried on by the *Sūbah*, who has his head-quarters at Navsāri. Here also are the court of the *prānt* Judge and the head offices of other departments. Education is well provided for, as there are two high schools (at Navsāri and Gandevi), three Anglo-vernacular schools, and 211 vernacular schools, the total number of pupils in 1904–5 being 13,133. At the civil hospital at Navsāri and seven dispensaries elsewhere, 41,266 patients were treated in 1904–5, of whom 74 were in-patients.

Navsāri Tāluka.—South-western *tāluka* of the Navsāri *prānt*, Baroda State, with an area of 125 square miles. Population rose from 53,523 in 1891 to 59,875 in 1901. The *tāluka* contains one town, NAVSĀRI (population, 21,451), the

head-quarters, and 60 villages. It is a flat plain, with two rivers running through it, the Mindhola on the north and the Pūrna on the south. The soil is black, *gorāt* or light red, and *besār* or mixed, except in the western part, which is marshy swamp. Among the chief crops produced are *jowār*, rice, cotton, castor-seed, and sugar-cane. In 1904–5 the land revenue was Rs. 2,37,900.

Bilimora.—Town in the Gandevi *tāluka*, Navsāri *prānt*, Baroda State, situated in 20° 46′ and 73° 0′ E., on the Bombay, Baroda, and Central India Railway, 13 miles distant from Navsāri, and 135 miles from Bombay. Population (1901), 4,693. The town is built on the bank of the Ambikā river, and a moderate trade is carried on in grain, molasses, castor-oil, fuel, and timber, by both rail and sea. Works are now being constructed to improve the port. It possesses a dispensary, Anglo-vernacular and vernacular schools, and public offices. The municipality has an income of Rs. 1,300 derived from a grant from the State. Factories for the manufacture of chocolate on a large scale and rice-milling have been erected here. Work in sandal-wood and ivory is carried on by a local firm.

Gandevi.—Head-quarters of the *tāluka* of the same name, Navsāri *prānt*, Baroda State, situated in 20° 49′ N. and 73° 2′ E., 3 miles from Amalsar on the Bombay, Baroda, and Central India Railway, and 28 miles south-east of Surat. Population (1901), 5,927. The town possesses a magistrate's court, a dispensary, a high school aided by the State, vernacular schools, and public offices. A municipality, constituted in 1905, receives an allotment of Rs. 3,500 from customs, excise, and tolls. There is a considerable trade in grain, molasses, *ghī*, and castor-oil. A large sugar factory, which was worked for some time by the State, has now been purchased by a private firm. The chief industry is hand-loom weaving.

Kāthor.—Town in the Kāmrej *tāluka*, Navsāri *prānt*, Baroda State, situated in 21° 17′ N. and 72° 59′ E., on the northern bank of the river Tāpti, about 22 miles from Navsāri and 10 miles from Surat. Population (1901), 4,407. The town possesses a Munsif's court, a dispensary, vernacular schools, an industrial school, and public offices. The place is remarkable for the number of Musalmāns, of whom there are no fewer than 2,444. They are chiefly Bohrās of the Sunni persuasion; and being people of great enterprise they repair in great numbers to Mauritius, China, Natal, and other distant places, where they stay for long periods, and return to Kāthor after

amassing sufficient wealth to enable them to settle permanently at home. The principal articles of trade in the town are grain, printed calicoes, and cloth.

Navsāri Town.—Head-quarters of the *prānt* of the same name, Baroda State, situated in 20° 57′ N. and 72° 56′ E., 147 miles from Bombay, with which it is connected by the main line of the Bombay, Baroda, and Central India Railway. It is an ancient place, known to Ptolemy as Nasaripa. Population (1901), 21,451, including 12,357 Hindus, 4,756 Pārsīs, and 2,753 Musalmāns. The town is intimately connected with the history of the Pārsīs in India. After the flight from Persia of those Zoroastrians who refused to abandon their faith at the bidding of the Muhammadan conquerors, a large band landed on the western coast of Gujarāt, of whom some betook themselves to Navsāri in 1142. Here they throve and prospered, and their *mobeds* or sacerdotal class thereafter made the town their stronghold, a position which has been maintained to the present day. The town itself shows signs of comfort and even of wealth, the streets are well watered, and the sanitation is praiseworthy. In the country round about are numerous detached houses with good gardens, the property chiefly of wealthy Pārsī merchants who have retired from business to their ancestral home. In the neighbourhood of these houses are plantations of date-palms, which are resorted to by visitors and inhabitants alike for the purpose of imbibing the famous toddy of the district. Date-palms grow everywhere, but the toddy that is obtained from Navsāri is deemed the most delicious and healthy. Owing to the proximity of the town to the sea, the climate is pleasant from the middle of April to the middle of June, as a mild breeze constantly cools the air. The water too is accounted most wholesome. Malhār Rao Gaikwār was fond of living here, and it was in this town that he was married for the fourth time. Before celebrating the nuptials he was married in due form to a silk cotton-tree, which was then formally destroyed, the object being to avert misfortune. He had been married twice but had no son and heir, and it was hoped by destroying his third wife, the tree, that his fourth venture would prove fortunate. Among public buildings of importance are the high school and the Anglo-vernacular school, the former known as the Sir Kawasji Jahāngīr Zarthosti Madrasa, and the latter as the Dādābhai Kawasji Tata school. Both buildings are modern, and the Baroda State has liberally assisted in their construction and maintenance. There are also a civil hospital, a public market,

library and reading-room, jail, distillery, and fine offices for the *Sūbah* and *prānt* Judge. Among other objects of interest in Navsāri are the Towers of Silence for the reception of the Pārsī dead, the large Fire-Temple known as *Atash* Bahrām, and the smaller ones or *agiāris*. To the larger temple all the young *mobeds* from Bombay and elsewhere are sent for confirmation, or to receive the apostolic succession of their order.

The town was once famous for its cotton cloth, which was in great demand at the English and Dutch factories of Surat in the seventeenth and eighteenth centuries for export to Europe; but this is produced no longer. Hand-loom weaving is carried on to some extent, but only coarse garments are made. The manufacture of the *kusti* or sacred thread of the Pārsīs, woven only by the wives of the *mobeds*, is however a work of considerable skill. The threads are largely exported to all parts of India, and the monopoly secures an industry for *mobed* ladies. There is also a soap and perfumery factory on the outskirts of the town, which has met with some measure of success. Many workers produce articles of copper, brass, iron, wood, and leather, for local use. A boot and shoe manufactory has lately been established.

Navsāri is administered by a municipality, reorganized in 1905 on a partly elective basis, which has an income of Rs. 8,500 from customs, excise, and tolls, besides a State grant of Rs. 5,500. The town has a large import and export trade by both rail and water. For the latter the Pūrna river, on the left or south bank of which the town is situated, affords fair conveniences, and the harbour is being improved.

Songarh.—Head-quarters of the *tāluka* of the same name, Navsāri *prānt*, Baroda State, situated in 21° 10′ N. and 73° 36′ E., on the Tāpti Valley Railway. Population (1901), 2,533. It is of historic interest as the place where the Gaikwārs first fixed their head-quarters. Formerly it must have been a flourishing town, and vast ruins still remain. The fort of Songarh is situated to the west of the town on a small hill, but the only portion of the defences still kept in repair is the entrance at the north end. In the lower part of the enclosed space are the ruins of what must have been a handsome palace with several storeys. This fort was originally seized from the Bhīls, some families of whom still hold *jāgīrs* in connexion with it. The town possesses a magistrate's court, a dispensary, and a special boarding-school for the boys and girls of the forest tribes. The boys are trained in carpentry and agriculture on a model farm attached to the

school, where experiments in cultivation and sericulture are also being carried out. Songarh is administered as a municipality, with an annual grant from the State of Rs. 800.

Vyāra.—Head-quarters of the *tāluka* of the same name, Navsāri *prānt*, Baroda State, situated in 21° 7′ N. and 73° 27′ E., on the Tāpti Valley Railway. Population (1901), 6,117. The town possesses a dispensary, Munsif's and magistrate's courts, a vernacular school, and public offices. It is administered as a municipality, with an annual grant from the State of Rs. 1,100. The only objects of interest are a Pārsī Tower of Silence, and two small dilapidated forts.

Amreli Prānt.—A *prānt* or district of the Baroda State, situated in Kāthiāwār, with an area of 1,245 square miles. It consists of seventeen portions. The two main areas are: (1) Okhāmandal, lying between 22° 5′ and 22° 35′ N. and 69° 5′ and 69° 20′ E., and bounded on the north by the Gulf of Cutch, on the west by the Arabian Sea, and on the east and south by the Rann or salt marsh that separates the district from Navānagar; (2) the *tālukas* of Amreli, Dhāri, Khambha, Kodinār, Dāmnagar, and Shiānagar, lying between 20° 45′ and 22° 4′ N. and 70° 42′ and 71° 55′ E. Of these, the Amreli, Dhāri, and Khambha *tālukas*, which adjoin one another and form the greater part of the territory, are bounded on the north and west by Jetpur and Junāgarh, and on the east and south by Gohelwār, while Kodinār lies between the Gir and the sea and has Junāgarh territory on the other two sides. Okhāmandal is a flat sandy tract, and most of the *prānt* is level. In the Dhāri *tāluka* a range of hills is found, divided into four groups known as Sarkala, Rajmal, Nandivela, and Lapala, their heights varying from 1,500 to 2,100 feet above the sea. Boundaries and physical aspects.

The vegetation other than the crops in fields includes, among planted or sub-spontaneous trees near dwellings, *Mangifera indica*, *Spondias mangifera*, *Tamarindus indicus*, *Aegle Marmelos*, *Anona squamosa*, *Ficus religiosa*, *Ficus bengalensis*, *Bombax malabaricum*, and other similar species. Hedges enclosing fields include shrubs like *Jatropha Curcas*, *Euphorbia antiquorum*, *Streblus asper*, *Capparis speciosa*, *Cadaba indica*, and *Celastrus senegalensis*. Climbing on these are various *Leguminosae* such as *Canavalia*, *Menispermaceae* such as *Tinospora*, and *Asclepiadaceae* such as *Daemia*. Field weeds include *Leguminosae*, such as *Crotalaria*, *Alysicarpus*, *Indigofera*; *Compositae*, such as *Blumea*, *Launaea*, *Sphaeranthus*, *Grangea*; *Scrophularineae*, such as *Celsia*, *Stemodia*, *Vandellia*; and many Botany.

sedges and grasses. In damp ground such plants as *Caesulia axillaris*, *Herpestis Monnieria*, *Mollugo hirta*, and *Aeluropus villosus* are plentiful. Waste places yield such plants as *Tephrosia purpurea*, *Heylandia latebrosa*, *Calotropis gigantea*, *Echinops echinatus*, *Jatropha gossypifolia*, *Fagonia arabica*, *Elephantopus scaber*, *Volutarella divaricata*, *Blumea Jacquemontii*, *Vicoa auriculata*, *Tribulus terrestris*, and *Achyranthes aspera*.

History.

Marāthā incursions into Kāthiāwār were first made by the Senāpati, Khande Rao Dābhāde, and his lieutenant, Dāmājī Gaikwār I; but it was not until the time of Dāmājī Gaikwār II (1732–68) that the greater part of the country was either subdued or laid under contributions. These conquests were, however, shared with the Peshwā by treaty in 1752–3. From this time up to the close of the century the Peshwā's and the Gaikwār's joint troops collected the tributes, while from 1799 to 1814 the Gaikwār farmed the Peshwā's share and employed his own troops to collect the whole. As he found great difficulties in collecting the tribute, arrangements were entered into by which a combined force of British and Baroda troops, accompanied by Colonel Walker, Resident at Baroda, on the part of the British Government, and Vithal Rao Devājī on the part of the Gaikwār, entered Kāthiāwār in 1807, and concluded agreements with the principal local chiefs which have since borne the name of Colonel Walker's settlement. The next significant event was that the Gaikwār's farm of the Peshwā's share terminated in 1814, and the Peshwā sent officers to collect his own tribute, thus introducing a double government into the country and also weakening the influence of the Gaikwār. But the downfall of the Peshwā in 1818 and the extension of the British power in Western India simplified matters; the Government succeeded to the Peshwā's rights, and became the paramount authority in Kāthiāwār, while the Gaikwār's administration was confined to his own possessions.

Population.

The population of this *prānt* in 1872 was estimated at 158,581. According to later enumerations it was: (1881) 147,468, (1891) 180,188, and (1901) 173,436. In the last year Hindus numbered 150,224, Musalmāns 19,771, Jains 3,267, and Pārsīs 20. The table on the next page gives the main statistics in 1901.

About 96 per cent. of the population speak Gujarātī, and the remainder chiefly Hindustāni and Marāthī. In 1901 the *prānt* contained 44 native Christians.

For the most part the soil is black and very fertile, but in Shiānagar a tract of half-marsh half-desert is found, where wheat is grown. The soil in Dhāri is lighter, and becomes red near the Gir. The crops grown are *jowār*, *bājra*, wheat, *udid*, *mag*, *math*, gram, *tal*, *banti*, *china*, cotton, sugar-cane, rice, tobacco, and red pepper. The cultivation of cotton is extending. The Gir cows and buffaloes and the Kāthiāwār horses and ponies have long been famous. The latter, in consequence of there being no professional breeders, do not show any improvement. Agriculture.

Tāluka.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.	Number of persons able to read and write.
		Towns.	Villages.				
Amreli	228	1	58	55,183	242	+ 6·9	5,263
Bhimkatta	4	...	1	866	217	−20·3	45
Dāmnagar	107	1	25	19,464	182	− 4·0	1,380
Shiānagar	52	...	10	4,029	78	−24·1	193
Dhāri	263	1	62	27,653	105	− 6·4	2,130
Khambha	115	...	28	6,456	56	−21·2	310
Kodinār	204	1	69	32,481	111	−16·3	1,696
Okhāmandal	268	1	43	22,689	84	− 1·8	2,410
Beyt Shankhodhar	4	1	...	4,615	115	− 0·2	729
Total	1,245	6	296	173,436	147	− 3·7	14,156

The only forest in Amreli is the Gir, a narrow and mountainous tract lying to the south-west of the Dhāri *tāluka*. Though in 1901 the area under forest was 46,600 acres, the Gir is probably more useful as a grazing ground for cattle than as a timber forest. Forests.

The industries are very limited, being practically confined to the weaving of cotton cloth, embroidery on cheap silk and cotton stuffs in Dhāri and Dāmnagar, a little silver-work at Amreli, a little iron-work at Dhāri, and some pottery at Chalavi in the Dhāri *tāluka*. There are, however, seven ginning factories, which employ a fair number of workers. The chief centres of trade are Amreli, Kodinār, Dwārka, Dāmnagar, and Dhāri. The want of railways is made up for to some extent by the existence of good roads leading to stations on the Bhāvnagar-Gondal-Junāgaḍh-Porbandar Railway. The *prānt* also contains the ports of Kodinār, Dwārka, and Beyt. Industries, trade, &c.

The land revenue rose from 8·1 lakhs in 1881 to 9·7 lakhs in 1891 and 10·5 lakhs in 1901. The demand had been reduced to 6·5 lakhs in 1904–5, but owing to famine only Land revenue.

Rs. 57,000 was collected. The increase in earlier years was due to a recent survey and settlement, by which all assessments are placed on a cash basis. The average rates of assessment vary from 7 annas a *bīgha* ($\frac{4}{7}$ acre) in Okhāmandal to Rs. 3-9-0 in Amreli.

Local self-government.

The number of municipalities is six: namely, AMRELI, Dāmnagar, DHĀRI, KODINĀR, DWĀRKA, and BEYT; and the grants assigned to them by the State in 1904-5 aggregated Rs. 5,800, in addition to the income derived from customs, excise, and tolls in Amreli. A District board and local boards were constituted in 1905.

Education and medical.

The *prānt* contains one high school (at Amreli), one Anglo-vernacular school (at Dwārka), and 148 vernacular schools, the total number of pupils in 1904-5 being 10,740. Education is compulsory in the Amreli *tāluka*. There are two civil hospitals and four dispensaries, at which 38,093 patients were treated in 1904-5, of whom 175 were in-patients.

Amreli Tāluka.—*Tāluka* of the Amreli *prānt*, Baroda State, lying between 21° 20′ and 21° 37′ N. and 71° 2′ and 71° 21′ E., with an area of 228 square miles. Population increased from 51,598 in 1891 to 55,183 in 1901. The *tāluka* contains one town, AMRELI (population, 17,197), the headquarters; and 58 villages. It forms a flat fertile plain, traversed by clear streams and relieved by stretches of grass and stony undulations. The fields are usually devoid of hedges, and there is nothing to interrupt the view save a few small clumps of trees at intervals. The soil is mostly black, and very fertile, the best land being on the north bank of the Shatranjī river, which runs through the *tāluka*. Among the chief crops produced are *jowār*, *bājra*, wheat, *tal*, *banti*, cotton, and sugarcane. In 1904-5 the land revenue was Rs. 70,000.

Okhāmandal.—*Tāluka* of the Amreli *prānt*, Baroda State, forming the most western portion of Baroda territory as well as of Kāthiāwār, and lying between 22° 5′ and 22° 35′ N. and 69° 5′ and 69° 20′ E., with an area of 268 square miles. The population in 1901 was 22,689, having been 22,280 in 1891. Okhāmandal came under the full sovereignty of the Gaikwār in 1817; but the Wāghers, who are the oldest of the aboriginal inhabitants, have often risen in rebellion, and had to be subjugated repeatedly by both British and Baroda forces. It contains one town, DWĀRKA (population, 7,535), and 43 villages. The aspect of the country is a dull and generally undiversified verdureless plain. In the northern part the soil is light red, alternating with a fairly rich black mould. Along

the coast it is sandy, but inland it is fairly productive. In the southern portion the soil is also light red, but in many places it is rocky and barren. The staple crops are *bājra*, *tal*, and *jowār*; and the rainfall is so scanty as a general rule that the tract may be said to suffer from chronic famine. Salt is procurable in any quantity, but its export is restricted by the rules of the Government of India. In 1904–5 the land revenue was Rs. 36,000.

Amreli Town.—Head-quarters of the Amreli *prānt*, Baroda State, situated in 21° 36′ N., and 71° 15′ E., 139 miles south-west of Baroda, 132 miles south-west of Ahmādābād, and about 10 miles from Chital, a station on the Bhāvnagar-Porbandar Railway. Population (1901), 17,977. The town is situated on a small river called the Thebi, and is fortified by a wall at present in a ruinous condition. It is an ancient place, the former name of which was Amarvalli. The Jūna Kot, or 'old fort,' is now used as a jail. Being the head-quarters of the *prānt*, the town possesses a civil court presided over by a judge, as well as a magistrate's court, and *Sūbah's* and other public offices. There are also a hospital, a high school, and various vernacular schools, a library, and a printing press. A municipal board was formed in 1905, with an income of Rs. 7,000 from customs, excise, and tolls, and a State grant of Rs. 3,000. The chief industry is hand-loom weaving, but it is not in a very thriving condition. Dyeing and a little silver-work are also practised. The town is, however, important as being one of the chief cotton marts of Kāthiāwār, and a busy scene is presented just outside the walls, where, during the season, there are five ginning factories at work. An officer of the Bombay Political department is stationed at Amreli as an Assistant to the Resident at Baroda.

Beyt Shankhodhar.—An islet in the Gulf of Cutch, forming a petty subdivision attached to the Okhāmandal *tāluka*, Amreli *prānt*, Baroda State. The name Shankhodhar is derived from the number of *shankhs* or conchs found there, or from its fancied resemblance to this shell. The island contains only one town, Beyt, situated in 22° 35′ N. and 69° 9′ E., the population of which in 1901 was 4,615. Its area is only 4 square miles, but it is a most sacred place to Hindus, especially Vaishnavas, as according to their legends a demon called Shankhāsur here swallowed the Vedas, which could not be recovered until Vishnu became incarnate as a fish, and pursued Shankhāsur into the depths of the sea, whence he brought back the sacred books. The principal temples are the

old and new sacred shrines of Shankh Nārāyan, and those dedicated to Krishna's four wives and his mother. The latter were of some antiquity, but were blown up by a British force in the war with the Wāghers in 1859. They were, however, rebuilt in the same year by Khande Rao Gaikwār. The town possesses a municipality, which receives an annual grant from the State of Rs. 900; a magistrate's court, and a dispensary. The harbour is deep and spacious, and small steamers can anchor close to the town in all seasons.

Dhāri.—Head-quarters of the *tāluka* of the same name, Amreli *prānt*, Baroda State, situated in 21° 20′ N. and 71° 5′ E. Population (1901), 4,262. The town contains an old fort which overlooks the junction of the rivers Natalia and Shatranjī, Munsif's and magistrate's courts, a dispensary, a military hospital, vernacular schools, and public offices. A detachment of the 3rd Baroda infantry regiment is stationed in a cantonment close to the Shatranjī. The municipality receives an annual grant from the State of Rs. 900.

Dwārka.—Town and port in the Okhāmandal *tāluka*, Amreli *prānt*, Baroda State, situated in 22° 22′ N. and 69° 5′ E., 235 miles south-west of Ahmadābād, and 270 west of Baroda. Population (1901), 7,535. Dwārka is considered one of the most holy places in India, and is greatly resorted to by Hindu pilgrims. In particular the temple of Dwārkānāth (Lord of Dwārka, a title of Krishna), which is built on the north bank of the Gomti creek, is said to be visited by at least 10,000 devotees annually, and most pious Hindus believe that it was raised in one night by supernatural agency. It is built of sandstone, plastered with *chunām*, and the main structure is five storeys in height, the highest being 100 feet from the ground. The whole is surmounted by a conical spire rising to the height of 150 feet. The interior consists of a shrine, and a hall with 60 pillars. At Dwārka is one of the four *maths* founded by Srī Sankarāchārya, the others being at SRINGERI in Mysore in the south, JAGANNĀTH in Orissa in the east, and BADRINĀTH on the Himālayas in the north.

The port of Dwārkā, known as Rūpan, is about a mile to the north of the town; but the anchorage is insecure, and most steamers have to lie two miles or more off shore. The lighthouse has recently been entirely renovated. The chief exports are *bājra*, *tal*, *ghī*, and small quantities of salt, while the chief imports are rice, wheat, *jowār*, sugar, piece-goods, &c. External trade is principally with Bombay, Surat, Karāchi, and Zanzibar. Dwārka possesses a hospital, a magistrate's court, Anglo-verna-

cular and vernacular schools, and public offices. It is also the head-quarters of the Okhāmandal battalion of Baroda troops, whose principal duty is to keep in order the Wāghers. Since the rebellion of these tribes in 1859, when the town was stormed by a British force, an officer of the Bombay Political department has been stationed here under the orders of the Resident at Baroda. The municipality receives a grant from the State of Rs. 1,900.

Kodinār.—Head-quarters of the *tāluka* of the same name, Amreli *prānt*, Baroda State, situated in 20° 47′ N. and 70° 42′ E. Population (1901), 6,664. It is a walled town, pleasantly situated on the south bank of the Singavada river, about 3 miles from the sea. It is administered by a municipality, which receives an annual grant from the State of Rs. 1,400; and it possesses Munsif's and magistrate's courts, a dispensary, a vernacular school, and public offices. Trade is carried on by sea with Bombay, Karāchi, Porbandar, and Mangrol, the principal exports being cotton, grain, and *ghī*. The imports are wheat, *jowār*, clothes, spices, and dry goods.

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